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*W. L. C.*

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THE  
**FAMILY PHYSICIAN;**  
COMPRISING  
RULES FOR THE  
PREVENTION AND CURE  
OF  
**DISEASES;**

CALCULATED PARTICULARLY FOR THE INHABITANTS OF THE

**WESTERN COUNTRY,**

AND FOR THOSE WHO NAVIGATE ITS WATERS.

WITH A  
**DISPENSATORY AND APPENDIX.**

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THIS WORK AFFORDS, IN SIMPLE LANGUAGE, A CONCENTRATION OF ALL THE PRACTICAL MATTER WHICH CAN BE DERIVED FROM THE BEST AUTHORITIES.

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**WITH ORIGINAL REMARKS.**

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BY A GRADUATE OF THE PENNSYLVANIA UNIVERSITY,  
AND HONORARY MEMBER OF THE MEDICAL SOCIETY  
OF PHILADELPHIA.

*Who has for years been acquainted with the Modes of Living, and with the Diseases of the West.*

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CINCINNATI:

PRINTED AND PUBLISHED BY W. HILL WOODWARD.

DISTRICT OF OHIO, SCT.

BE IT REMEMBERED, That on the seventh day of February, in the year of our Lord one thousand-eight hundred and twenty-six, and in the fiftieth year of American Independence, William Hill Woodward, of said District, hath deposited in this office the title of a Book, the right whereof he claims as Proprietor, in the words and figures following, to wit:

“The Family Physician; comprising Rules for the prevention and cure of Diseases; calculated particularly for the inhabitants of the western country, and for those who navigate its waters. With a Dispensatory and Appendix. This work affords, in simple language, a concentration of all the practical matter which can be derived from the best authorities. With original remarks. By a graduate of the Pennsylvania University, and honorary member of the Medical Society of Philadelphia, who has for years been acquainted with the modes of living, and with the diseases of the west.”

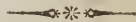
In conformity to the act of Congress of the United States of America, entitled “An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned,” and also of the act entitled “An act supplementary to an act entitled ‘An act for the encouragement of learning by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned, and extending the benefit thereof to the arts of designing, engraving, and etching historical and other prints.”

ATTEST—WILLIAM KEY BOND,  
*Clerk of the District of Ohio.*



OLD HISTORY 27 SEPT. 1855 52483-

## PREFACE.



It will be found in the following pages, that without the affectation of quoting authorities, we have considered as of lawful use, much that has been already written on the subjects investigated.

To the valuable treatise of Dr. Buchan particularly, we are deeply indebted. He was a philanthropist, as well as an able Physician; and we have no fear, but that his own desires and views will be met and subserved by a further dissemination of his many valuable observations. His remarks on the preventive part of Medicine, are of peculiar and universal interest. But since the day in which he wrote, improvements have been made in medical practice; and the difference between our climate and that of England, or Scotland, would greatly prevent the usefulness of his book in this country. A considerable portion, however, of the Family Physician, has been gleaned from untrodden ground; for in relation to many objects of local interest, we have found nothing written upon which dependence could be placed.

It has been our steady aim, to select modes of expression adapted to the capacities of even moderate English scholars. This was a more difficult task than might be supposed; for it is easier to offer an appearance of learning, than to write plainly and intelligibly on matters that have been kept remote from general observation.

Those phrases or words not in common use, but which have been necessarily inserted, and are not explained at the time, will, it is believed, be found in the larger edition of Walker's Dictionary.

It is not supposed that this work will convey information sufficient, in all cases, to supercede the help of a physician: indeed, in every important case of disease, a skilful medical man, where it is practicable, ought to be employed; but such an one cannot always be obtained.

We feel no hesitation in stating, that a great number of practitioners in this country, especially in remote places, from the want of sufficient opportunities, are but imperfectly skilled in the principles of their assumed profession. The establishment of respectable Medical Schools, will, no doubt, have a strong tendency to remove this evil; and all who deal in medicine, with honest views, but with a consciousness of deficiency, will be anxious to avail themselves of such instruction as these schools afford.

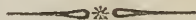
There is besides, throughout the Western Country, an order of settled and migratory quacks, who fatten on the credulity and prejudices of the ignorant, and who can never be rooted out by penal laws. But in proportion as the public mind becomes enlightened with regard to the healing art, they will gradually sink into their deserved insignificance; or, if they merit it, will be held up as objects of detestation. Many of these last, may be justly ranked among the most abandoned of the human race.

Tissot, Arbuthnot, Buchan, and Thomas, with others, not unknown in Medical annals, have furnished works of this nature: and it was the intention of the venerable patriot and Physician, Rush, of Philadelphia, to have written such a book, professedly for heads of families: but his benevolent labours were terminated on earth, ere he found leisure to effect this purpose.

We have sedulously endeavoured to render these pages correspondent with the title: and in simplicity of heart hope, that the work will prove serviceable to many, from whom we never expect any compensation.

*Cincinnati, June, 1826.*

## INTRODUCTION.



ACKNOWLEDGEMENT has already been made, and that without any humiliating feelings, of our obligations to Dr. Buchan; it remains on this subject but to remark, that wherever it has been practicable, and the text needed no alteration, we have used his own words; esteeming this a more honorable mode of procedure, than that of garbling and transposing, which has been very common in all ages, with those writers, who, possessing no useful ideas of their own, were afraid of being thought indebted to abler men than themselves.

We are well aware that many affect an originality, which is only to be found in the form of expression; whilst others are fearlessly original in defiance of truth.

Instead of apologizing for having used the knowledge of our predecessors, we have regretted the necessity of differing, in many instances, from very respectable authorities: and feeling the weight of responsibility resting on us, in such cases, have particularly endeavored, in that matter which is purely original, to hold ground strongly fortified by experience and the deductions of right reason.

Between the extremes of servile imitation and vain self-confidence, there is a path in writing and teaching, that can be followed only by him who requires sufficient evidence of what he admits from others, and who is able to demonstrate what he himself asserts.

In an assemblage of sciences, so extensive and important as those which immediately appertain to medicine, there is a field open, for the exploring of which, in its present state, the life-time of no one man, however intelligent and industrious, would suffice: important discoveries are also made from day to day, in different parts of

the world, knowledge becomes gradually more simplified as new truths are elicited, and the mass of medical information is, by the printer's art, thrown into a common stock. We have used only our just privilege in selecting appropriate matter from this fund.

It would be a poor argument against this work, to allege that it comprehends not all that is known by those who have devoted their whole lives, with the most favorable opportunities, to the investigation of medical subjects. Should it fill its proper lot, being intended for practical usefulness, more, it is hoped, will not be required.

Much of human science is involved, even at this day, in uncertainty; therefore, that which is absolutely established as truth, without a necessity for trusting to theories or speculation, may be considered by the public as an offering of ripe fruits from the cultivated field.

With all the light that at present is possessed in relation to the more abstruse parts of our profession, there is still much lumber of the schools for future generations to discard—and those at least who have learned, even in a measure, "*to know how little can be known*," will not think the less of a medical book, because it lacks the emblazonment of technical terms.

The ablest physicians have professed themselves indebted more to observation than to what is generally considered as science; although observation should be built on sound science in the minds of those who instruct.

Many diseases, for instance, are not difficult to be understood if plainly described, or to be treated when understood, and combatted, in their incipient stages: and this work describes the first symptoms in those diseases of which it treats, so particularly, that without being obliged to have recourse to the aid of another, which perhaps might not be obtained in time, the parent, guardian, or friend, of the sick can meet the enemy on his first appearance.

A dose or two of medicine taken at the onset of disease will frequently prevent a dangerous illness with its attendant train of expenses.

Suitable instructions for nursing are also needed in a country where so much time is necessarily devoted to ac-



tive and laborious employments, that few have leisure, opportunity, or it may be inclination, unless the means are placed directly in their way, to examine this simple art—a knowledge of which is too commonly considered as belonging properly only to the doctor or professed nurse—and thus great numbers are consequently necessitated often to be guided by others, no better informed than themselves.

To the preventive part of medicine, as taught in this book, particular attention is requested. Many ideas on that important subject, notwithstanding our obligations to others, will be found new. The maxim that “*an ounce of prevention is worth a pound of cure,*” is not the worse for age; but thousands by the very means which they use in attempting to avoid disease, lay themselves open to its influence.

If men can be brought to think and reason for themselves, they must see the absurdity of many observances in relation to those in delicate health, to the sick and the convalescent, which are merely traditionary, and either inefficient or injurious.

We have no doubt but that many vegetables, the growth of our own country, which have not been introduced into regular practice, are valuable as medicines, and we are at all times glad to receive useful information or assistance from any source: but that advice or medicine is too seldom esteemed valuable which is not shrouded in mystery.

The quack who deals in herbs, roots, or “*Indian Physic,*” derives his celebrity from the secrecy which he affects in the preparation of his hazardous doses: the Indians themselves place more confidence in charms than in visible means: but a few years ago, in the most civilized parts of the world, wisdom was supposed to be couched only under an enormous wig, while a gold-headed cane was considered its necessary appendage; and the Druids, who were physicians amongst the ancient Gauls and Britons, upheld their credit with the people, by the reputed efficacy of their mysterious incantations.

However it may be denied, the same principles of superstition, variously modified, exist in the present day:



to prove this, we need but refer to the almost infinite number of leaves, teas, drawing plasters, healing plasters, and other articles, to be used at certain times and seasons, and which are considered by people, in many respects well informed, as of sovereign virtue. It is truly painful to reflect on the number of valuable lives lost by trusting, when in exposed situations, to ridiculous notions esteemed preventives, and in the early stage of sickness, to pernicious nostrums.

There is a very common error that can scarcely be sufficiently exposed. People, when sick, wish to take physic which can do no harm; they are afraid to use any thing that may injure the system. Now, it will be found, that we are no friends to the unnecessary administration of medicine; we are confidently of opinion that too much is used even by those very persons who are unwilling to resort to active means of relief when most necessary: but it should be understood, that those articles which can do no harm, will rarely, if ever, do any good.

Let the person in health use simple nourishment, and avoid all unnecessary stimulants, as well as debilitating doses of salts and the like; but when the functions of the body, from whatever cause, become disordered, "the work," to borrow a phrase of Dr. Rush, "must be taken out of nature's hands," and in proportion to the violence of disease ought to be the energy of practice pursued.

Mildness of medical treatment is real cruelty. If a patient labour under a severe attack of pleurisy he should be bled, and that not by stinted measure, until relief is obtained. If he be seized with a bilious fever, a large dose of calomel ought to be given; experience has proven that this medicine, more than any other, affects the liver, from which organ bile is secreted—a dose of salts or of castor oil would do comparatively little good.

There can be no confidence in medical practice where means are not used sufficiently powerful to effect the end desired. There are thousands west of the mountains labouring every year, for months, under agues and their consequences, who might, by a proper mode of treatment and suitable nourishment, be restored to health in at least a few weeks from the first attack.

The fear of using active medicines at the first, is productive of incalculable disadvantage to the sick; indeed, such articles are almost always resorted to eventually, but often not until the powers of the system have been exhausted, by the combined influence of disease and a temporizing policy.

In advising on this subject, Dr. Buchan's, and most other popular treatises on the practice of physic, are very incorrect. Indeed it is only of late years, and especially in the United States, that physicians have become fully convinced of the advantage to be derived from a decisive, prompt, and vigorous mode of practice; the diseases of our own country especially require it.

Many diseases have long been considered as contagious or infectious,\* which the present improved state of medical science has proved to be no more so than the tooth or ear ache. There are some, it is true, which we know to be directly communicable from one individual to another, such as gonorrhœa, syphilis, the small pox, and a few others; but fevers, properly so termed, are not communicated by a specific contagion emanating from a sick individual. There have even existed strong doubts in the minds of able medical men, in relation to the contagious nature of the measles and whooping cough, it being thought by some that these diseases depend upon, peculiar miasmata† in the atmosphere, similar, in a measure, to that cause which produces the disease commonly termed influenza. On this subject we shall give no opinion.

Peculiar causes depending on the atmosphere, and originated by the sun's influence on the surface of the earth

\* From the derivation of the two words, contagion and infection, the former would seem to imply the propagation of disease by immediate contact or touch. The word "infection" has however been most commonly used as descriptive of this act. The word "contagious," is defined by Walker "infectious, caught by approach," and the word "infectious," contagious, influencing by communicated qualities." Thus, although they have been obtained from Latin words of different meanings, we see that their significations are nearly if not altogether the same.

† Miasmata: Minute and subtle particles in the atmosphere, causing disease, emanating from bogs or fens, putrifying vegetable or animal matter, or from distempered or poisonous bodies.

and water, produce fevers at certain times, in certain places, affecting many persons in nearly a similar manner.\*

Independent of the fevers that are common in marshy countries during summer and autumn,—neighborhoods in cleared situations, remote from stagnant waters, and which were esteemed exceedingly healthy for many years, have been visited, in certain seasons, with desolating febrile diseases. Sometimes typhus fever, in different forms, spreads its ravages in the autumnal months, at other times in the dead of winter.

Viewing these various facts, the most judicious medical observers are obliged to allow that there is something in the origin of many fevers beyond the grasp of human intellect, while they are well aware that little can be gained by speculations on subjects, which are not in themselves, understood.

It is established, however, that these diseases are not communicated by infection or contagion. There is not on record an instance in which the yellow fever, or any other of those fevers formerly deemed infectious, has been communicated by a sick person to a healthy attendant, after the person affected had been removed entirely out of the neighborhood and atmosphere where the disease was prevalent. This is a fact of great importance, and if alarm and the fear of infection be excited, because many in the same vicinity, or perhaps in one family, are attacked by similar fevers, let it be remembered that the same causes will naturally produce the same effects.

There is no doubt, however, but that the atmosphere of a confined sick room, charged with exhalations from the patient's body and bed-clothes, is unwholesome, and may, very possibly, be the cause of disease: in this case the blame must generally lie on the attendants; for cleanliness and a moderate portion of fresh air always are admissible and beneficial to a sick person.

\* The general atmosphere of an epidemic (*a*) circle is charged with a material, of unknown quality, distinctly offensive to health and animal life.

*London Medical Repository for 1822.*

(*a*) Epidemic a disease prevailing generally, and affecting great numbers.

On the subject of contagion we will further add a very interesting letter written by Dr. Johnson, and taken from the *London Medical and Physical Journal* of Nov. 1821. Dr. Johnson and Dr. Jackson are both eminent medical men:—

SPRING GARDENS, October 8.

SIR—At a time when a most fatal pestilence is ravaging the southern coasts of Spain, and exciting such terror in the neighbouring states as to induce them to put in force the most rigid quarantine discipline, it may not be uninteresting to the British public to know that a countryman of their own, the veteran Dr. Jackson, now, I believe, on the verge of seventy, went voluntarily, and at his own expense, last year, (1820,) to the scene of this fever's devastations, in order to ascertain whether or not it was contagious, and what were the most effectual modes of treatment. He has just published a volume, containing very curious and important observations on this dreadful epidemic.—It is a consolation to know that this very able and experienced physician has proved, very satisfactorily, that the disease is of a local origin; that it never was imported into those countries where it now rages; nor is it possible, almost, that it should ever be transported thence to any distance among the states in its vicinity. Popular prejudice having assigned the disease to a foreign origin, popular terror has clothed it in properties of the most virulent contagion; and this last error has so divested the people of common humanity, that not only are the sick and wounded abandoned to their fate, but those who fly to the open country or mountains, (where, in fact, the malady cannot exist, much less propagate itself,) are treated like contaminated deserters from a pest-hospital, and either left to starve or put to death by their barbarous countrymen. It is consoling, however, to be certain, (and it is most certain,) that a few weeks more,—that is, the approach of cold weather,—will cut off the sources of the epidemic, (which could not be the case were it a common contagion,) and thus annihilate, at least for a season, the disease itself.

In proof that the disease is not personally contagious, Dr. Jackson brings forward the following, among other authentic facts:—"In the year 1800, when upwards of ten thousand people died at Xeres de la Frontera, sixty persons were employed to bury the dead. The buriers entered the houses where the dead lay,—took the bodies in their arms, often, it is presumed, in a loathsome state,—put them into the carts in heaps, and drove them to the place of interment. None of the buriers were infected." A somewhat similar event happened in the year 1819, at Saint Lucar. The buriers of the dead having shamefully abused their office, the friars of the Franciscan convent most nobly volunteered the interment themselves. "The offer," says Dr. Jackson, "was accepted; and the friars, on entering on the duty they had thus imposed upon themselves, found the majority of the houses, or sick apartments, deserted, the bodies of the dead lying in various postures upon beds or on the floors. They wrapped them in sheets, or in such other covering as presented itself in the apartment, carried them to the bier in their arms, and afterwards in the bier on their shoulders to the grave. Not one of



the meritorious band was attacked by the disease." In short, from the records of the past and the evidence of the present, there is not the least reason to doubt that the epidemic now ravaging Andalusia is of the same nature, though perhaps more violent in degree, as those which have, in autumnal seasons, appeared in the same places, at longer or shorter intervals, for centuries. The poison, or malaria, which produces the disease, is the product of the soil itself, elicited by particular seasons; and the fever so generated, if directly exported to other countries, could not there be propagated, for want of its primary pabulum.

Such is the opinion of Dr. Jackson, who visited the dying, and examined with his own hands the dead, so lately as in October, 1820. It is also the opinion of the most enlightened English and French physicians who have visited the unfortunate theatre of the pestilence. Excepting the inconvenience, no harm apparently results from the quarantine precautions adopted by the neighboring states; but the contagion conviction, impressed on the minds of those residing in and near the sickly towns and districts, gives rise to the most deplorable events, and deprives the unhappy sufferers of all succour or consolation from even their nearest friends or relatives! The operations of nature, however, and the revolution of the seasons, will soon put a period to the ravages of the epidemic.

JAMES JOHNSON, M D.

We have enlarged somewhat on the subject of contagion for one important reason: many people are so fearful of "*catching the complaint!*" to use a common expression, from the sick, that they lose sight of the weightier and far more important means of preventing disease in an unhealthy situation, or sickly season: and perhaps some also neglect those duties which we all owe to friends or strangers, who are in sickness or distress.

It has been said, and justly, that "the first part of charity is to remove evil, and the second to do good:" thus, in medical instructions, it is necessary to remove erroneous impressions before correct advice can be useful.

Those diseases of our country which are contagious or infectious will be found pointed out, as they are investigated, and directions have been given that danger from them may be avoided.

The maladies peculiar to females have, as their importance demands, received no small share of attention. It is hoped, that, on this subject, although little altogether new is presented, we have offered a mass of information, such as has not hitherto met the public eye, at least in this country; and calculated to prevent, in many instances, long and distressing trains of consequences, which too often result from mismanagement and neglect in



simple cases: much may also be done, without the aid of a physician, for the preservation of health in delicate female constitutions, where actual disease has not as yet made its appearance.

On the management and nursing of children, able and experienced men have already written largely; therefore we have found little new to offer. If the attention of parents need at all be called to this subject, it may suffice to remark that our work embraces no one more important.

We conclude these preliminary observations with the words of Dr. Buchan:

“To assist the well-meant endeavours of the humane and benevolent in relieving distress; to eradicate dangerous and hurtful prejudices; to guard the ignorant and credulous against the frauds and impositions of quacks and impostors; and to show men what is in their own power, both with regard to the prevention and cure of diseases, are certainly objects worthy of the physician’s attention.—These were the leading views in composing and publishing the following sheets.”



THE  
**FAMILY PHYSICIAN.**



OF THE CLIMATE OF THE WESTERN COUNTRY, ESPECIALLY  
WITH REFERENCE TO ITS INFLUENCE ON HEALTH.

THIS extensive region may be considered as a great valley, lying between the Alleghany mountains on the east, and the mountains of New Mexico and Missouri on the west: its rivers uniting from the east, the west, and the north, form one common channel, by which they are poured southwardly.

From the gigantic scale on which this valley has been cast, we naturally look for varieties of climate; but owing to the remarkable junction of its waters, and their determined course, as well as in consequence of those ranges of mountains which we have mentioned, there are certain features of uniformity attached to its atmosphere, which pervade almost the whole western country, and only fade away, and become gradually more indistinct, as we recede northwardly from the Mexican Gulf, and enter into higher and colder latitudes.

The Alleghany mountains, as well as distance from the Atlantic, prevent us from experiencing the cold drizzling weather, which, in the spring and early part of summer, is so disagreeable along the eastern coast, and extends a considerable distance inland, propelled by north-

east winds: and a vast extent of continent, with lofty mountains, prevents the possibility of similar weather from the west. From the north the winds also blow principally over land. The south and south-west winds,\* in this country, are most apt to be loaded with vapours. That part of these vapours is accumulated by the south wind, after it leaves the Gulf of Mexico, in passing over the bed of the Mississippi and its numerous attendant lakes and swamps is not doubted: but the south-west winds, which oftener prevail, are equally and as uniformly charged with vapours.†

In the month of January, 1824, a warm south-west wind was observed by a gentleman near Cape Girardeau, in Missouri, on the Mississippi river, to blow for more than three weeks, frequently so hard as to threaten the buildings, and carrying an immense mass of clouds in a direction towards the upper lakes, and the head waters of the Mississippi: this is not mentioned as a solitary instance, but as an example of those currents of air; and there seems reason to suppose that long continued winds, of this description, have their origin over the vast Pacific ocean, and pass across the southern extremity of North America, the province of Texas, and the Arkansas country: a sufficient cause cannot be assigned for their long continuance, and peculiar humidity, short of this.

Thus, besides the rain which falls from clouds proper to this country, there is a great accession of moisture from the Gulf of Mexico, and, according to our supposition, from the Pacific. It has been noticed that much rain seldom falls until the force of long continued and severe south-west gales is abated, when the vapours compressed, probably by counter currents of air, descend.

\* Perhaps the most common wind of long continuance, especially in the winter, which is charged with vapours, or with heavy clouds affording rain, is from one point to the southward of south-west.

† Neither the celebrated Volney, nor professors Mitchell or Drake, in their views on this subject, seem to have considered that a south-west wind, felt in the heart of the western country, cannot come from any part of the Mexican Gulf in a direct line. There will be no difficulty in ascertaining this fact by reference to a correct map of the United States.

This, in the winter, is one cause of floods in the rivers, which are further increased by the breaking up and dissolving of the ice.

However some may be disposed to question the extent of space, over which these south-west winds (it appears reasonable to believe,) travel, yet the facts, which must be admitted, and their consequences, are of importance in assisting us to become acquainted with the climate.

After such weather, as we have described, has continued a length of time in winter, it is common for the wind to come out from between the north-west and the north-east intensely cold; this also was the case in Missouri in 1824, and many neighborhoods were soon visited with peculiarly fatal fevers, of the typhus kind, considerably resembling the disease which a few years since prevailed in Kentucky, and elsewhere, called the cold plague. Nor was sickness confined to that particular section of the country; it extended largely through the Arkansas, Illinois, and elsewhere: especially in low situations, in very young settlements, and where the wilderness had been but partly cleared and cultivated: it was particularly noticed that those who lived in warm, close houses, and wore suitable clothing, were the most exempted from its attacks.

The north-west wind, coming over the Rocky Mountains and a bleak expanse of continent, is often in the winter extremely cold, especially in those states which lie most exposed. The weather is generally much more variable in the winter than it is in the same latitude on this continent east of the mountains; but is, on an average, milder. In the summer the weather is less variable than it is east of the mountains, and the heat, although not greater, is more permanent.

In level tracts of country, particularly prairies and barrens, the air is less elastic, and neither man nor beast can perform the same labor, with safety, that they have been accustomed to execute in the Atlantic states. This comparative want of elasticity in the atmosphere is partly owing to the absence of morning and evening breezes.

Another peculiarity of the western country, and connected with its climate, well deserves to be noticed.—



The rivers, with very few if any exceptions, are dependant on periodical or casual rains or thaws for what is considered their full volume of water; and at certain seasons, especially in summer, they become, comparatively, insignificant streams: a drought, in many places, succeeding to a superfluity of water on the face of the earth, vast quantities of decaying vegetable substances and stagnant waters in parts of the beds of creeks in ponds and swamps, are thus left exposed to the rays of the sun. As we travel northward, these unpleasant appearances are less frequently noticed—but the lake country is not without them, being much of it swampy.

Exhalations from the face of a country thus situated, have a tendency to impart at least the causes of langour to the atmosphere, and if we have not the raw and chilling north-easterly winds of the middle and eastern states, we lack also the invigorating influence which is derived from a constant agitation of the atmosphere, and a continual change and succession of its particles. A very material consequence in relation to health follows: there are fewer consumptions with us than in those states of which we have been speaking, but more bilious diseases. This last remark is applicable particularly to the upper part of Missouri, Illinois, Indiana, Kentucky, Ohio, and the Michigan territory, for further south, on the waters of the Mississippi, the Santee, the Savannah, and the Alatamaha, the causes of diseases are more nearly the same.

Notwithstanding, however, the general influence of those causes which tend to render this climate insalubrious, there are many situations in the western country as healthy as any on the continent of North America; neither is there any other section of the Union which has not its disadvantages in relation to health.

Having thus noticed some general and extensive coincidences of the climate, and some causes by which it is influenced, we will endeavor to examine a few distinguishing characteristics which mark different parts of the country, and which have an influence on the human constitution.

In the vicinity of the rivers—as for instance in Kentucky below the Tennessee, in Illinois below Fort Massac, and

on the east side of the Mississippi, in Missouri on the west side of the Mississippi, from Cape Girardeau to New Madrid, on parts of the Arkansas, and in many other places above the 34th degree of latitude, is found a great deal of low ground, which at times is partly covered with water, by floods coming down the rivers, and at other times by long continued and heavy rains, which are not uncommon: the growth of natural vegetation on this soil is exceedingly luxuriant.

These low grounds are intersected by gullies, containing water the whole year, and by channels of permanent streams, which, in a dry season, are but rivulets; but in a time of heavy rains, some of them become a quarter of a mile wide. There are also frequently many small elevated spots of land, well calculated for cultivation. During a flood, the water is often forced up through some opening, so as to cover large tracts of land, forming temporary lakes. The mosquitoes in the warm weather, in such situations, are innumerable. When a dry time commences, in the summer, and the waters begin to be exhaled from the surface of the earth, the air feels close and oppressive; many of those who have been a considerable time resident, are attacked as the heat and drought increases, with agues that are evidently in a great measure dependant on, or at least, connected with, diseased action of the liver; and often, also, of other glands contained in the cavity of the abdomen: these agues frequently continue for months, and sometimes alternate with dysentery. Strangers or new comers are mostly attacked with greater violence, by diseases, more confirmedly bilious; and when they are released from the first and most alarming symptoms, find entailed on them agues which last three, six, or nine months, and seldom leave the constitution more than the wreck of what it was in health.

From the thirty-fourth degree of latitude, southwards, many of those last mentioned causes which affect the atmosphere, and through it the human system, are increased in all places during the summer season; and in times of low water, the air communicates perceptibly a sense of lassitude: in addition, winds are frequent from the south-west, which passing over the marshy and unhealthy

western shore of the Mexican Gulf, still more unfit the air for the purposes of health. Those who navigate the Mississippi at such times, smell distinctly the pestiferous effluvium that arises around, and is carried on the wings of the wind.

At Natchez, which is more sickly than New Orleans, in consequence of being exposed to accumulated causes of disease, and at the same time destitute of breezes from the sea, these influences are but too sensibly perceived; and experience has shown that buildings erected under the bluff, nearly on a level with the water, are safer residences than those built on the top of the bluff; for it seems to be a fact, that when the whole mass of air is loaded with pestilential effluvia, a retreat from its direct and unqualified influence, by seeking unexposed situations, and even using fires and fumigations, is advisable.

In the vicinity of New Orleans, the westerly winds, in addition to domestic miasmata, bring the same atmospheric poison, which has been already noticed, from the border of the Gulf; and the most grateful and refreshing breezes experienced in hot weather, are from the south-east; these come over an open expanse of salt water.

It may be noticed generally, that as we proceed south, from its head waters, in the course of the Mississippi, the debilitating influence of extreme heat in the summer, with the increased condensation of miasmata, cause the diseases to become more severe: ague and fever gradually give way to bilious fevers of the highest grade, and in Natchez and New Orleans, and the country between and around them, very frequently in a few hours from the attack of disease, the hand of death presses heavy on the patient.

The terms Barren and Prairie are not very definite, if we may judge from common usage. A Barren is generally supposed to be land somewhat elevated, and tolerably level, frequently of good quality, the timber of which has been destroyed, probably for ages: and a Prairie, a low, level tract, occasionally wet, and somewhat resembling meadow land: both barrens and prairies in a natural state, are covered with long coarse grass. The big prairie in

Missouri, between Cape Girardeau and New Madrid, is according to the above definition, perhaps more properly barren land. The same might be said of other prairies. The word prairie in the French language, signifies meadow.

Many of the barrens since they have been enclosed and preserved from fires, begin to be, where they are not cultivated, covered with young timber.

Large tracts of barrens are found in perhaps all of the Western States, and are tolerably healthy situations.—Agues and bilious fevers are not uncommon, however, among those who reside on them. The want of spring or elasticity in the atmosphere, is sensibly perceived in the summer and autumn, on the barrens and prairies.—Ponds of stagnant water are common, and the running streams are few. From their exposed situation, the sudden changes in winter, acting upon systems relaxed by the influences of summer, are severely felt.

It is in the high wooded country, at a distance from stagnant waters and swamps, that we find in most of the western states an atmosphere conducive to health, and to a full development of all the physical powers of man.

That some who have been born, or who have become climatized, in places, which to a stranger prove unhealthy, are generally free from disease, and live to be aged, proves little: for it is a well known truth, that the constitution of man is calculated for adaptation to every clime, and almost every mode of living. The same argument might be adduced by the Asiatics, as favoring the habitual use of opium, or even of corrosive sublimate, and these practices are not uncommon among them.

There are certain situations, which universal consent has allowed to be more healthy than others; thus, the hills of East Jersey, on the Atlantic coast, with their pure, bracing atmosphere, are acknowledged to afford a more salubrious residence than can be found in the vicinity of the wooded swamps, and the morasses, with which the southern part of that state terminates. And yet, on the southern extremity of New Jersey live some of our hardiest and most robust fellow citizens.

There is, however, little doubt but that many situations in this country, now unhealthy, or deemed so, will become,



in the gradual progress of improvement, safe places of residence. A barbarous mode of half cultivating the soil, neglecting a proper attention to precautionary means for the preservation of health, suffering stagnant ponds to remain near dwellings, and the like causes, which will be spoken of in the next chapter, have placed many residents in an unnecessary state of liability to disease.

Limestone water is most common throughout the Western Country, and is generally good; but sometimes it passes through impure or imperfectly formed beds of this earth, it then has a disagreeable taste, and is unwholesome.

Among the large towns, Pittsburgh, Lexington, Cincinnati, and Nashville, may be esteemed the most healthy.

If any, deceived by erroneous statements, think that we have been too severe in estimating the climate of this country; our reply is, that truth, not always told, and but seldom at first popular, will stand the test of examination, and must prove eventually beneficial to all who come within the sphere of its influence.



ADVICE TO EMIGRANTS, RECENT SETTLERS, AND TO THOSE  
VISITING THE SOUTHERN COUNTRY.

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The outlines which have already been given, will afford some information to emigrants from other sections of the union, or from Europe. We will now offer a few cautionary remarks, particularly intended for such as are about to settle, or have recently settled in this section of the United States.

Of new comers, there are two tolerably distinct classes; the one comprising farmers, mechanics, and indeed all those who calculate on obtaining a subsistence by manual industry; the other is composed of professional men, tradesmen, and adventurers of every description. Towards the first class our attention is now directed, premising that throughout a great portion of the Western Country, except in large towns, almost every mechanic is necessarily also a farmer: the population being in but few places sufficiently dense to support that designation of mechanical employments, which is common in the eastern and middle states.

For the industrious and temperate of this class, our country holds forth inducements which are not generally known or understood.

The language of indiscriminate panegyric which has been bestowed on its climate and soil, has conveyed little correct information, and is a source of many fears and suspicions in the minds of people at a distance. Other accounts have described the Western Country as uniformly sickly; but the habit of exaggeration in its favor, has been most prevalent: neither need we wonder, when much of the information communicated, has been afforded by interested land-holders or speculators, and by travellers, whose views have been superficial, and whose journies have been performed generally either on the rivers or by post roads.

The first enquiry of a substantial farmer, from one of the old settled states, is mostly for good land in the vicinity of a market, and afterwards, whether the situation be healthy. It is true, there are many places in the Western Country affording the qualities expressed in this description, but they are perhaps all occupied; and it would be, in several respects, more advisable for a farmer, possessing even a considerable sum of money in hand, to enquire first for a healthy situation, and then good land.

The spirit of improvement throughout the United States, especially evidenced in canalling, will, it is hoped in a few years, open modes of communication, which as yet are wanting, with the markets.

The same remarks will apply to the poorer class of emigrants. If they value their own health and that of their families, the main object of their attention will be to secure if possible, a situation remote from the fogs that hover over the channels of large rivers, which become partly dry in summer, and from the neighborhood of swamps, marshes, ponds, or small lakes.

Every person on coming from beyond the mountains, and especially from the eastern states, or Europe, will have to undergo some degree of change in his constitution before it becomes naturalized to the climate: and all who move from a cold to a considerably warmer part of the Western Country will experience the same alteration: it will, therefore, be wisdom for the individual brought up in a more rigorous climate, that he seek a situation where the circulation of air is free and unimpeded, and that he avoid those flat and marshy districts, which have been already described.

Those who settle in new countries, are almost uniformly exposed to inconveniences which have an unfavorable influence on health. They are seldom able for a length of time to erect comfortable places of residence, and indeed, many postpone this important object of attention, even after their circumstances will permit them to build comfortable dwelling houses.

Wool is mostly a scarce article in new settlements, so that cotton and linen garments are too frequently worn in winter. There is another circumstance which no doubt has an unfavorable influence on health, especially

among the poorer class, it is the want, during the summer season particularly, of substantial food. This is sometimes owing to indolence or improvidence, but perhaps oftener, to the circumstances in which a few families are placed, at a distance from any established or opulent settlement.

Erroneous views are too generally entertained in relation to hardening the human system, and the analogies drawn from savage life, are altogether inconclusive. The manners of the North American Indians are essentially different from those of the whites. It is true, there is a portion of the latter, especially in Illinois and Missouri, who from infancy are educated almost in the habits of the aborigines.

We have frequently heard the example of savages referred to, as an argument in favor of attempting to strengthen the constitution by exposure. There is plausibility in this, but might not the example of the negroes in the lower parts of South Carolina and Georgia, be also quoted as evidencing the propriety of living on corn meal and sweet potatoes, and working every day in the water of a rice field during the sickly season. They are generally more healthy than the whites who own them, and who reside on their plantations in the summer. The civilized man may turn to savage life perhaps with safety, as regards health; but then he must plunge with the Indians into the depths of the forest, and observe consistency in all his habits. These pages are not written however, for such as are disposed to consider themselves beyond the pale of civilized society; but for the reflecting part of the community, who can estimate the advantages to be derived from a prudent care of health.

Much disease, in especially the more recently settled parts of this country, is consequent to neglecting simple and comfortable precautionary means; sometimes this neglect is owing to misdirected industry, and at others to laziness or evil habits.

To have a dry house,—if it be a log one, with the openings between the logs well filled up, so that it may be kept warm in winter; to fill up all holes in its vicinity which may contain stagnant water; to have a good clean

spring or well, sufficient clothing, and a reasonable supply of provisions, should be the first objects of a settler's attention:—but frequently a little wet, smoky cabin or hovel is erected, with the floor scarcely separated from the ground, and admitting the damp and unwholesome air:—all hands that can work are impelled by the father's example, to labor beyond their strength, and more land is cleared and planted in corn, than is well tended: for over exertion, change in the manner of living, and the influence of other debilitating causes, which have been mentioned, bring sickness on at least a part of the family, before the summer is half over.

It is unnecessary for even the poorest emigrant to encounter these causes of distress, unless seduced by the misrepresentations of some interested land holder, or by the phantasies of his own brain, to an unhealthy and desolate situation, where he can neither help himself, nor be assisted by others.

Many persons on moving into the *back-woods*, who have previously been accustomed to the decencies of life, think it is little matter how they live, because *no one sees them*. Thus, we have known a family of some opulence to reside for years in a cabin, unfit for the abode of any human being, because they could not find time to build a house, and whenever it rained hard the females were necessarily engaged in rolling the beds from one corner of the room to another, in order to save them from the water which poured in through the roof. This cabin was intended at first as only a very temporary residence, and was erected on the edge of a swamp, for the convenience of being near to a spring. How unreasonable must such people be, if they expect health!

Clothing for winter should be prepared in summer. It is a common, but very incorrect practice among many farmers, both west and east of the Alleghany mountains, to postpone wearing winter clothing until the weather has become extremely cold: this is a fruitful source of pulmonary diseases, of rheumatisms, and of fevers.

With regard to providing a sufficiency of nourishing food, no specific directions can be given, further than to recommend, what is much neglected, particular attention



to a good garden spot: and to remark that those who devote undivided attention to cultivating the soil, receive more uniform supplies of suitable nourishment, than the more indolent who spend a considerable portion of time in hunting.

New settlers are not unfrequently troubled with diseases of the skin, which are often supposed to be the itch: for these eruptions they generally use repellant external applications; this plan of treatment is prejudicial.

The most proper time for the removal of families to this country from the Atlantic States, is early in the spring, while the rivers are full; or if the journey be made by land, as soon as the roads are sufficiently settled, and the waters abated. But if the fall be a more convenient season, one or two hard frosts should be waited for, and these rarely occur until the latter end of October.

Persons coming from a distance, who have not resolved in their minds on the place of their future residence, unless they mean to establish themselves high up in the country, in which case Pittsburgh or Wheeling would be recommended, are advised to make Cincinnati a *post of observation*. It possesses for this purpose many advantages over any other town in the Western Country. The terms of living are moderate, the situation is central and healthy, it is a city of industry, and from its situation on the bank of the Ohio, affords superior facilities of information. If it be supposed by any that partiality has instigated this eulogium, we can appeal fearlessly for the correctness of our observations to all well informed persons, who are practically acquainted with this country.

Persons unaccustomed to the climate of the lower Mississippi country, are necessarily exposed whilst there in the summer season, to many causes of disease. It will be advisable for such, to have a prudent care of their health; and yet a care distinct from that finical timidity which renders liable to early attacks of sickness.

There is one important consideration, which perhaps has been somewhat overlooked by medical men, who have written on this subject. Natives of colder and healthier regions, when exposed in southern and sickly climates experience, if they remain any length of time with-

out evident and violent disease, an alteration in the condition of the liver, and of the secreted bile itself: when it passes through the bowels, its color being much darker than usual. Sometimes indeed, it appears to be "locked up in the liver," the stools having an ashy appearance. This state of the biliary secretion, is frequently accompanied, although the patient is otherwise apparently in tolerable health, by a pain over the eye-balls, particularly when the eyes are rolled upwards.

The proper mode of treatment for such symptoms, is to take, without delay, not less than twenty grains of calomel, and in eight hours a wine glass full of castor oil. The tone of the stomach should not be suffered to sink too much after the operation of the medicines, which if necessary, may be safely repeated in twenty-four hours.—Wine, brandy, or porter, in quantities sufficient to renovate the feelings, ought to be used, when the cathartics have performed their office. Nutritive food which is easy of digestion, should also be taken in moderate portions at a time.

Where diseases are rapid in their progress, and dangerous, no time is to be lost.

The practice of taking salts, or other aperients, when in exposed situations, and for the purpose of preventing disease, is injurious. It is sufficient that the bowels be kept in a natural and healthy state; for all cathartics, even the mildest, have a tendency to nauseate the stomach, create debility and weaken the digestive faculty. A reduction of tone in the system, which is always advantageous, will be more safely effected by using somewhat less than usual of animal food, and of spirituous, strong vinous, or fermented liquors. The robust will derive benefit from losing a little blood.

It ought to be well understood, that as we approximate tropical climates, the doses of medicine, when taken, should be increased in quantity, and repeated with less delay than is admissible in colder countries. Exposure to the night air is certainly prejudicial; so also is the intense heat of the sun in the middle of the day. Violent exercise should be avoided, as well as an undue indulgence in venereal pleasures. Bathing daily in water of a com-

fortable temperature, is a very commendable practice; and cotton worn next the skin is preferable to linen.

It is impossible to prevent the influence of an atmosphere pregnant with the causes of disease; but the operation of those causes may generally be counteracted by attention to the rules laid down, and it is no small consolation, to be aware, that on recovery from the first attack, the system is better adapted to meet and sustain a second of a similar nature. The reader will understand, that we do not allude to relapses, occurring, while the system is enfeebled by the consequences of disease.

A CONCISE VIEW OF THE HUMAN BODY, AND OF THE USES  
OF ITS MOST IMPORTANT ORGANS.

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ANATOMY teaches the structure of the body, and Physiology, which is properly the Philosophy of Anatomy, explains its functions.

Our limits, and the nature of this work, will not permit to introduce an elaborate and lengthy disquisition of these subjects: but, aware that much misapprehension, and many hurtful prejudices, are consequent to total ignorance of anatomy and physiology, it will be endeavored, to offer such outlines as may, in themselves, prove beneficial, and perhaps induce some to prosecute further inquiries.

However important it may be for the professed medical man, and especially the surgeon, to possess a minute and critical knowledge of anatomy, we are of opinion with the celebrated Cheselden, that in this study, "what is most worth knowing is soonest learned, and is least the subject of dispute."

*Of the Bones.*

The bones, which are by far the most solid parts, are of various shapes and sizes, and calculated to support, to protect, and in some instances, to enclose the more tender and important portions of the animal frame.—They are all developed at the period of birth, although many parts of them are then in a cartilaginous state; they do not attain their complete firmness and density until the age of twenty or twenty-one in males, but in females, the whole body arrives at its full growth and perfection somewhat earlier.

The wonderful adaptation of the bones to their respective uses, has been a continual theme of admiration with anatomists: those particularly of the arms, hands, legs.



feet, and indeed all intended to be useful in motion, are fitted to each other by a most admirable mechanism, forming hinges in many parts, and in others admitting rotary or circular motions. The ends of those bones which play upon each other are covered with cartilage or gristle, a considerably elastic substance, and are united together by ligaments: the joints are also lubricated by a fluid which keeps them moist: there is an exact similarity in this respect between man and the animals that are slaughtered for domestic use. The long bones are mostly hollow, containing a fatty substance called marrow, which is secreted by small arteries that penetrate their substance, and all the bones are covered by a thin, close investment which is termed the periosteum:—this is of a fibrous texture, and is supplied with nerves, arteries, veins, and absorbent vessels; on the head, this membrane is termed the pericranium. The periosteum is little sensible in recent wounds, but when it becomes inflamed, affords exceedingly painful, throbbing sensations; it appears to be a medium of communication between the blood-vessels of the softer parts and the bones; which are formed from the blood by the secretory action of certain vessels, and appear at first in the form of jelly, then become cartilaginous, and afterwards solid.

The bones of the skull, several in number, and which become more compact as maturity in age progresses, contain the brain, strictly so called; the bones of the neck and back contain the spinal marrow.

### *Of the Muscles.*

MUSCLES, or, *what is termed the flesh in animals*, are composed of fibres too minute to admit of full investigation, they are possessed of a power to contract or shorten themselves, which they derive from the brain or nervous influence. In enraged persons, those who are in convulsions, or deranged, they possess wonderful power. Every muscle is surrounded with a thin membrane which seems to pervade its whole substance, enclosing all its fibres separately, so far as we can ascertain.

Muscles are divided into voluntary and involuntary: thus, the heart is deemed an involuntary muscle, and the stomach, bladder, and intestines are enabled to perform certain offices, which do not depend on the will, in consequence of their muscular structure. The most important office of the voluntary muscles is to assist in motion, and we consequently find a muscle of this description uniformly attached at either end, to different bones or tendinous substances, having a power, by its contraction, to alter, in some respect, their position. The muscles, by the aid of which we masticate food, are attached to the lower jaw, and the upper part of the face, and it is only by their diminishing in length, and increasing in circumference, that we can bite, or divide any thing with the teeth.

The attachment of muscles to bones, is seldom immediate, but generally by tendons or sinews. A tendon is a white, glistening, hard inelastic, insensible substance, apparently a continuation of the muscular fibres, without their red colour, or the power of contraction. Tendons serve many purposes of convenience, being less liable to injury, and smaller than the muscles, they admit a freer motion of the joints, near which they are attached, than if the muscles themselves were there inserted: tendons are surrounded, as well as muscles, by thin membranes, affording an unctuous matter for the purpose of lubrication.

### *Of the Brain and Nerves.*

Nothing in anatomy is more difficult than the study of the brain: however it is not difficult, to select such important facts, relative to this subject, as are well known and necessary for our present purpose.

The brain has been defined "the material organ of thought." It is formed of the same white, or rather ash coloured texture in man, as in beasts. This organ has, by some anatomists, been divided into two parts, the upper and fore part or cerebrum, the lower and hinder or cerebellum, and others have added a third, the spinal marrow, which is but a continuation of the same substance en-

closed in the vertebræ or joints of the neck or back. It is unnecessary for us to make any distinction between them. The brain of man is proportionably larger than that of any other animal.

The uses of the brain are important and numerous: it is covered from external violence, not only by the skull, but also by several membranous coats: the spinal marrow is even more effectually protected than that portion of medullary matter which is contained in the head.—Nine pair of nerves are given off from the brain, (proper,) and thirty-one pair from the spinal marrow, through which the various senses are endued with discriminating power, and muscular action is set in motion.

The nerves are long white cords resembling marrow, which ramify and are distributed in every part, endowed with sensibility: in their passage, through the body, they occasionally communicate with each other: their use is evidently two-fold—firstly, to communicate sensibility and the power of motion, and secondly, to convey impressions to the brain.

### *Of the Heart, Circulation of the Blood, Arteries, Veins, and Lungs.*

The heart is a hollow muscle of great strength: its use is to propel the blood, thus giving an impulse to the circulatory system.

For the discovery of the circulation of the blood, we are indebted to Dr. William Harvey, who published his first work on this important subject about two hundred years ago.

The heart is placed obliquely in the cavity of the chest, somewhat on the left side; it is of a conical shape, and its apex points towards the fifth rib: it contains four cavities—from two of these, termed ventricles, proceed the two principal arteries, the pulmonary, which passes to the lungs, and the aorta, or artery of the body. These arteries in their separate courses divide into numerous branches; the two other cavities of the heart are termed auricles and receive the returning blood by the veins.

In the process of circulation, all the blood of the body is collected in two great veins, the ascending and descending *venæ cavæ*, and by them thrown into the right auricle of the heart: as soon as this becomes full, and distended, it contracts and sends the contained blood into the right ventricle: from this cavity it is propelled into the pulmonary artery, by the ramifications of which it circulates through the lungs; there undergoing a change, and imbibing a principle essential to life. The bright red colour that distinguishes arterial blood, is caused by its receiving, in this circulation, a considerable portion of the oxygen, which is a constituent of atmospheric air, and which is separated from it when inhaled into the lungs. The blood returns from the lungs to the heart by the four pulmonary veins, and is evacuated into the left ventricle: this, when distended, contracts and throws the blood through the great artery, called the aorta, to every part of the body, whence it is returned by the veins, having lost its bright red colour, into the two *venæ cavæ* before mentioned, to undergo again the same double circulation, first through the lungs, and then through the general system.

The heart is furnished with valves to prevent, after its contractions, the blood from passing back. The two great arteries, the pulmonary artery, and the aorta, are also furnished with similar organs at their origin.

In infants, before breathing, there is only a single circulation; very little blood passing through the lungs, the source of life being received from the mother through the umbilical cord or navel string.

The action of arteries termed the pulse, corresponds with that of the heart, and is effected partly by the contraction of their muscular coats.

Veins do not pulsate, and are furnished with valves to prevent the blood from retroceding in its passage to the heart; the blood passes more slowly through the veins than through the arteries.

The quantity of blood contained at one time in the body is generally from twenty-four to thirty pounds.

The lungs are divided into two distinct parts, filling a considerable portion of the cavity of the chest, and are



formed by ramifications of the windpipe into a great number of small air cells.

The constant motion in which the lungs are kept by the act of breathing, with the great and ceaseless circulation of blood, which is generally increased during disease, through their delicate structure, are causes that render pulmonary affections difficult to cure when they have once become fully established.

*Of the Stomach, Intestinal Canal, Digestion, and Assimilation.*

The œsophagus, or gullet, by which food and drink is conveyed into the stomach, is a membranous and muscular canal, placed behind the trachea, or wind pipe, through which air is admitted to the lungs. The gullet is smooth inside, and well supplied with mucilaginous matter which renders the passage of the food easy.

The stomach is situated in the upper part of the abdomen or cavity of the belly, this cavity is separated from the thorax, or chest, by a strong muscular partition called the diaphragm, or midriff; the stomach is a membranous sack, having muscular fibres, and will contain about two quarts of water. At its lower orifice is a valve or circular muscle, this prevents a regurgitation of substances which have passed through, unless, as sometimes is the case, it is overcome in the act of vomiting.

The whole of the intestines below the stomach, form a convoluted membranous tube, about five or six times the length of the body: the portion of this tube next the stomach, of about twelve fingers breadth in length, is called the duodenum, and receives, by a common opening, a duct from the pancreas or sweet bread, and another from the liver, through which bile is poured out.

The pancreas resembles much, in shape, a dog's tongue, and secretes a fluid very similar to saliva, or spittle.

The principal use of the liver appears to be, the secretion of bile, which is collected in a very small sack called the gall bladder: healthy bile is of a yellowish colour, inclined to green.

Food received into the stomach undergoes the process of digestion; on this subject many absurd notions are still entertained, the change which takes place in the aliment being ascribed to putrefaction, fermentation, or some other causes equally without any existence.

Physiologists are agreed in considering digestion in the human stomach a solution of the food, principally effected by the gastric juice, a liquid which is largely poured out from the surface of this organ, and which is the product of glandular exhalation, or a peculiar secretion from the blood.

After passing through the stomach, the altered mass undergoes, in the duodenum, a further change, by a portion of the fluids which are thrown into that canal becoming united with it. The upper portion, especially, of the intestinal canal, is furnished with numerous minute vessels termed lacteals, that take up from the contained mass that part which is fit for the purposes of animal life: the portions which they receive is termed chyle; these lacteals unite and form one tube called the thoracic duct, through which the chyle is conveyed into a large vein, and thus into the general circulation.

### *Of the Glands and their uses.*

Glands are organized parts of the body, varying considerably from each other in appearance and use, but they all contain blood vessels, absorbents, and nerves. These parts are intended for the secretion or alteration of some fluid: they have also ducts by which the secreted or altered fluid is thrown off.

In the kidneys urine is secreted, or in other words separated, in the liver bile, in the breasts of the female milk, in the salivary glands spittle—and so of the rest.

The skin also, in a state of health, throws off a large quantity of fluid matter by sensible and insensible perspiration, but more by the latter.

Whilst animated with the principle of life, the whole human frame is an exquisitely constructed laboratory, where thousands of unnoticed operations are ceaselessly progressing, and where the disturbance of some apparently unimportant function is often followed by disease and death.

## ON THE EXTERNAL SENSES.

THESE are five in number, viz: Feeling, Smelling, Tasting, Hearing, and Seeing: through them, or some one of them, we receive a knowledge of material objects.

This must be evident to those who have reared infants, and who have noticed with reflection, the manner in which they acquire information.

*Of Feeling.*

The sense of feeling is possessed by a great part of the body, external and internal; but the touch by which we become acquainted with the size, figure, and consistence of bodies, is found most delicate in the ends of the fingers: no doubt this was primarily intended to be the case, but the effect of habit, the provisions of nature for accidents or contingencies, and the powerful influence of necessity on individuals, have often been demonstrated in those, who, losing by misfortune their arms, or having been born without them, possessed the utmost perfection of this sense in their toes, and could also use them with an adroitness nearly equal to that which is displayed by the fingers.

The power of ascertaining the nature of objects by merely touching them, has been possessed, by some blind persons, in a very great degree.

*Of Smelling.*

The sense of smelling is possessed by a soft membrane which lines the internal cavity of the nostrils: this membrane is largely supplied with minute and soft terminations of nerves.

Most substances emit odours, although many odours are not perceived, except when in a very concentrated state: of their consistence, manner of propagation, or mode of

conveyance, we have very little certain information: neither is it in relation to odours alone that science and philosophy stand at a loss; in many other instances the effect only is known, while the cause lies hidden.

In some cases of sickness, benefit is obtained by certain volatile particles coming in contact with the organ of smelling.

We seem to be less dependant on this sense than any other, therefore it may be regarded as the least important.

### *Of the Taste.*

The tongue is the principal organ of taste, although the lips, palate, and perhaps other parts of the mouth, possess, in a degree, the power to discriminate between sapid bodies. Substances which are pleasant to the taste of those whose habits of life and whose senses have not become vitiated through excess, will be found mostly useful for sustenance, as well as conducive to health: and substances disagreeable to the taste are generally found injurious.

We speak not however, of minerals and such other articles as are evidently not intended for nourishment.

Those animals especially, which live on vegetables, are furnished with a very complete structure of the organs of taste; that they may know to distinguish between wholesome and hurtful food.

Many individuals, even in this new country, who can scarcely be termed drunkards or gluttons, (these epithets perhaps would be too severe,) pamper their appetites with very highly seasoned meats and spirituous or vinous liquors to such an excess, that they could scarcely judge correctly, by the taste, of wholesome foods or drinks.

### *Of Hearing.*

An anatomical description of the ear would here be out of place, and indeed, with all the knowledge that has been obtained of its curious internal structure, there are many phenomena connected with this organ that are but imperfectly understood. At different times, parts, which



had been thought essentially important, have been destroyed by disease, and yet the sense of hearing remained. It may, however, be remarked, that in a state of health a membrane divides the outer part or external canal from the inner, and more curious part: the outer canal is about an inch in length; there is also a very small tube extending from the inner part of this organ, opening into the mouth; when this small tube is clogged up, hearing is not entirely perfect. Sound or hearing depends upon a vibratory motion, communicated by the atmosphere, and which operates upon a nerve peculiarly distributed in the inner structure of the ear.

In some cases of sickness, and especially during inflamed states of the brain or its membranes, the sensibility of this nerve is distressingly increased. Occasionally deafness is caused by this nerve becoming palsied.

The outer passage of the ear affords a secretion commonly called ear-wax: this no doubt, from its tenacity and bitterness, has a tendency to prevent the access of insects; sometimes, however, not very uncommonly in children, the ear-wax becomes hardened, and fills the canal, causing deafness: a little sweet oil dropped into the ear a few times will loosen it, and then it may be carefully removed.

### *Of Seeing.*

It would be difficult, if possible, to explain the curious and complicated structure of the eye without anatomical demonstration; neither would it consist with the nature of our work, to attempt so lengthy and most likely unprofitable a labour: a few plain observations on the subject, however, may be useful.

The ball of the eye is covered by several coats: the transparent part of the outer coat, which is termed the cornea, admits the rays of light that pass through an opening in a membrane situated a small distance behind the cornea; this opening is called the pupil: the membrane in which the pupil is found contracts by means of circular but very minute muscular fibres. Passing through the pupil, the rays of light strike the hindermost internal coat of the

eye; this is an expansion of a nerve on which the impression of those rays causes vision.

A palsy of this nerve constitutes a species of blindness called *gutta serena*; this disease may be known by the eye retaining a healthy appearance.

There is a small transparent body immediately behind the pupil which sometimes becomes thickened in consistence and of a milky colour, not admitting the rays of light: this alteration of the part constitutes what is called a cataract, and causes another species of blindness.

The tears are secreted from small glands. The eyebrows, eyelids, and eye-lashes, all assist in protecting this delicate organ from injury.

Many aged persons, and some young ones, who stand in need of spectacles to relieve or assist certain states of the eyes, fear to use them, lest premature weakness should be induced. Such may rest assured, that they need feel no apprehension on that account; it is always advisable to use, when needed, such glasses as afford a mild light and moderately assist the sight, and to obtain others of greater power as they may be wanted.

Those who are desirous of further information relative to the eye, may, by obtaining Wistar's or Horner's Anatomy, and operating themselves on the eyes of bullocks or sheep, obtain the knowledge of many interesting facts, which would much facilitate the study of the science of the nature and laws of vision.

ON THE PASSIONS.

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THIS part of our treatise, may be considered by some as little relevant to the main proposed object—but such is not the case.

In the prevention and cure of diseases, more is frequently required, than merely to avoid their physical causes, or to administer medicine.

We, however, propose to avoid all metaphysical reasonings, and as the term mind, will be necessarily used, in order to prevent being misunderstood, define it, when mentioned, to mean the amount of intelligent power resident in man. By a Passion, we understand a violent and exclusive feeling influencing an individual.

We profess not to be acquainted with the essence of mind itself, but are aware of the strong influence exercised over it, by the passions; also of the influence of mental feelings, which may scarcely be termed passions, over the system, in many cases of disease.

Morbid affections of the mind, moreover, surely claim our sympathies in an equal degree, with those causing mere bodily pain. A nice observer of human nature has asserted, that “more die of broken hearts than is generally supposed.” This observation has been verified, at least by the few, who have studied man as he is, and who have not been content to rest satisfied with, and form judgments upon first appearances.

Men studiously conceal their weaknesses and faults from observation, and would rather appear deficient in any part, than where they are conscious of imbecility. Thus the miserable equally desire to conceal the real causes of many sufferings: we are speaking now of those who can acutely feel the sense of humiliation.

Parents and friends, by acting cautiously on a knowledge of this fact, for fact it is, however it may be questioned,

by avoiding direct enquiries, and consulting the temper and bent of a person laboring under melancholy or evident and continued discomposure, will frequently be able to find means by which they can "minister unto a mind diseased."

Common place words of condolence, and common place advice, without any definite bearing, seldom do any good. A deep wound must heal from the bottom, nor should it be probed too rudely; and those only who by patience, prudence, and gentle forbearance, invite the sufferer to confidence, can expect to chase away the gloomy shadows which so often flit around a distempered imagination, or to reduce into calmness and composure, the wavering intellects of a desponding fellow creature.

It has been recommended by many able writers, that the attendants of the sick should devote marked attention to soothing that irritability which is consequent to a derangement in the action of the vital functions.

Fretfulness frequently brings on, and always increases fever, as well as pain; while we find that hope, properly encouraged, induces the patient to obedience and fortitude; fortitude may be imparted, and is often needed, for even the firmest at times sink under the pressure of accumulated bodily and mental sufferings, and proper consolation will frequently brace up the system more effectually, than any cordial that can be taken from a cup.

It is when the mind is aroused, by the cheering influence of comfortable words, by an affectionate sympathy, and an encouraging expression of countenance, that medicine does the most good, that cordials invigorate, or that suitable nourishment is taken with satisfaction into the enfeebled stomach.



*Of Love.*

Love is the strongest passion to which the human species is liable, and when it has usurped a sovereign dominion over the youthful and inexperienced mind, frequently imparts a tinge of either gladness or sorrow, to the whole tenor of succeeding life.

The approaches of love are often insidious, especially in the female breast. Unaccustomed to analyze her feelings, and mostly swayed by them, woman fancies herself safe, cool, and collected, until some unexpected incident proves that her peace is at the mercy of another.

Love is grounded in sensual inclinations: but where it springs up in a mind imbued with virtuous principles, these inclinations appear to have but little influence.

The magic power of this passion often transports its votaries, in fairy dreams, beyond, what to them seems the dull routine of real life, and inspires romantic notions and expectations, which are never realized. Notwithstanding, however, disappointments, they look back, when advanced in age, on the early scenes of youth; and as the "days of other years" pass before them, even regret that they have been taught by the lessons of experience.

Dr. Buchan justly remarks, that "The passion of love, with which people are so ready to tamper, is one of the most dangerous."

Lunatic asylums afford ample evidence, that the derangement of intellect is often the result of disappointed hopes, when

We pause not to dwell on the fate of many who droop and perish, or sink into the haunts of infamy, after having been ensnared by the villanous arts of the seducer; for this, at the present, falls not within our province.

As yet we have viewed this subject more particularly with reference to females. The consequences of disappointment in love are, very often, equally terrible to the hardier sex. Man, in addition to the pangs of an unrequited or unhappy passion, which had engrossed his whole heart, and all the energies of his mind, is, from his exposed situation, his education, and a pride, or stubbornness, which becomes the less governable as it is placed under heavier requisitions, liable to be led into errors which may render him the object of hatred and contempt, rather than of pity.

But if love may be the source of sorrows, it is still a necessary base for domestic felicity:

“ And say, without our hopes, without our fears,

“ Without the home that plighted love endears,

“ Without the smiles from partial beauty won,

“ O ! what were man ?—”

to share dangers, exile, shame, and  
fidence and integrity bind hearts  
e would compel, or gold would

their inclinations and duty. The first thing which parents ought to consult in disposing their children in marriage, is certainly their inclinations. Were due regard always paid to these, there would be fewer unhappy couples, and parents would not have so often cause to repent the severity of their conduct, after a ruined constitution, a lost character, or a distracted mind, has shown them their mistake.”—DR. BUCHAN.

In addition to the above named gentleman’s observations, we would add, that even when children have arrived at maturity, it is surely the duty of parents to point out the disadvantages which would result from making an imprudent choice, and particularly to place before daughters, in a proper light, the characters of those calculated, by vices, to make them wretched, especially if any of that description should present themselves as suitors.

The above advice we are confident will need no urging.

But a mere match of interest, where the heart is not engaged, and more especially if it be engaged elsewhere, is but legal prostitution, and cannot be productive of happiness.

### *Of Jealousy.*

Among the catalogue of enormities that are recorded in the pages of history, many of the blackest must be ascribed to Jealousy.

We have represented love, as the most intense of human passions, and in proportion to the expectation of anticipated felicity, or the estimated value of the object when possessed, will necessarily be the pangs of mistrustful suspicion, or the fear of bereavement: but in addition, when this malignant fiend takes possession of the breast, pride and self-love, which are directly assailed, become aroused, and prevent the appearance of despondence, while they often prompt, upon slight presumptive evidence, bitter animosity against the supposed offender: for

“Trifles, light as air,

“Are, to the jealous, confirmations strong

“As proofs of holy writ.”

Jealousy is not the certainty of unfaithfulness in a beloved object, but a state of doubt and suspense: even during its most violent paroxysms, rays of hope will at times gain admittance, to render as it were, visible that darkness which over-shadows the mind: when again some newly recollected source of suspicion stings the disturbed imagination into frenzy; and self-destruction, or the murder of another, is no uncommon consequence.

Poets seem to have exhausted their powers in delineating this monster, who, to borrow another image from Shakspeare, makes the food he lives upon.

However, unhappily, there may be too often cause for the existence of jealousy, it is beyond a doubt, that the innocent have frequently been rendered miserable through life, by unwarranted suspicions. Those then, and especially females, who wish to prevent even doubts in the minds of persons dearest to them, should be always guarded against trifling gaiety which may be misinterpreted, or any indulgence of whims that may appear like gallantry.

The triumphs of a coquette inflict pain in the breast of her lover, and sometimes disgust him: while a straight forward, circumspect, and candid deportment, in both sexes, during courtship, and after marriage, is calculated to ensure that peace and mutual confidence which is essential to connubial felicity.

### *Of Envy.*

This has been termed a severely just vice, because it always punishes itself.

Although the envious endeavor to conceal from others the base and sordid current of their feelings, yet they seldom blind discriminating observers.

The conditions of human existence are such, that there is need for each one to keep a constant guard against that part of his or her own character that is exposed to error by weakness, and at the same time to watch carefully those evil propensities, which are most likely to destroy the nobler attributes of the mind.



Men are very apt to suppose their own state more uncomfortable than that of others, for "every heart knoweth its own sorrows" best; whilst but very few, highly as the mass of mankind prize sympathy and pity, make others acquainted, as we have already mentioned, with the nature of their secret and most poignant griefs.

It is a natural desire emanating from self-love, to appear happy, it is also common to part with the substance for the shadow; and if the real condition and feelings of those whom the world esteems placed in enviable situations were truly known, many of them would excite pity, and not a few, contempt.

Dr. Young was well aware of this, when he remarked, that

Never man was truly bless'd,  
But it compos'd and gave him such a cast  
As folly might mistake for want of joy.

Envy is characteristic of a very little, or a very depraved mind.

"Base envy withers at another's joy,  
And hates that excellence it cannot reach."

Cambyzes, King of Persia, slew his brother Smerdis out of envy, because he could draw a stronger bow than himself, or any of his followers; and the monster Caligula slew his brother, because he was a beautiful young man.

Mutius, a citizen of Rome, was noted to be of such an envious and malevolent disposition, that Publius, one day, observing him to be very sad, said, "Either some great evil is happened to Mutius, or some great good to another."

"Dionysius, the tyrant, (says Plutarch,) out of envy, punished Philoxenius, the musician, because he could sing, and Plato, the philosopher, because he could dispute better than himself."

When Aristides, so remarkable for his inviolable attachment to justice, was tried by the people at Athens, and condemned to banishment, a peasant, who was unacquainted with the person of Aristides, applied to him to vote against Aristides. "Has he done you any wrong,"

said Aristides, "that you are for punishing him in this manner?" "No," replied the countryman, "I don't even know him; but I am tired and angry with hearing him called —*the just*."

To feel pain at the sight of what is esteemed excellence or happiness, argues a truly diabolical disposition, and we would recommend to those who find themselves at all moved by the impulses of this tormenting spirit, that they immediately begin to cleanse their bosoms of such "*perilous stuff*" by application to some useful employment, remembering that virtue alone can ensure peace, and that those who perform their duties and abstain from evil, in whatever situation they may be placed, stand an equal chance of rational happiness, which after all that has been said and written by authors on the subject, will be found to exist only in a well regulated mind.

The heroic soul, midst all its bliss or woe,  
Is never rais'd too high, or sunk too low,  
But stands alike prepared, in every stage,  
To scorn a courting world, or spurn its rage.

BLACKMORE.

### *Hatred and Revenge.*

To thee I call,  
But with no friendly voice, and add thy name,  
O Sun! to tell thee how *I hate* thy beams.

*Salan's Address to the Sun.*

MILTON.

Anger, Hatred and Revenge are very nearly allied, or they rather slide into each other by gradations, between which it is impossible to draw correct lines of demarcation.

Men sometimes hate, having real or imaginary reasons for just enmity, if enmity be at all justifiable, and in other instances even this plea is not offered as an excuse.

The very existence of such a passion as love is a proof that its contrary, hatred, may at any time be waked up. Indeed, individuals, possessing the warmest affections, are most likely to err in the other extreme.

We speak now of those whose minds have been as yet unwarped by malevolent propensities: and allude particularly to that hatred which originates in a sense of injury.

But there is a hatred allied to envy, which stands opposed to whatever is good or virtuous: this malignant feeling is breathed forth in the quotation which stands at the head of the chapter. Closely allied to this species of hatred, is the ill-will of those who are goaded by ambition, avarice, or lust, and which is directed, without exception, against all objects that stand between them and the gratification of their desires.

Some men, it appears, find it extremely difficult to forgive injuries, and a continuance of resentment, with the desire of revenge, is considered, in certain states of society a virtue.

For never can true reconcilement grow  
Where wounds of deadly hate have pierced so deep.

MILTON.

We recollect an anecdote of an aged Caledonian, which illustrates the expression of the poet.

This man had been at enmity, for many years, with a neighbor, but supposing himself on his death-bed, and being admonished, by the ministers of religion, that it was necessary for him, if he looked for happiness hereafter, to die in peace and Christian charity with all men: he sent for his enemy, and they were, to all appearance, reconciled: he then felt that he could depart in peace. The neighbor, however, whose heart was touched with generous feelings, expressed a hope, that his former foe, but present friend, would recover from his illness, and that they would enjoy together the fruits of their reconciliation. "Stop," exclaimed the sick man, "and mark you all—that if I recover from my present disease, this reconciliation goes for nothing."

Although hatred may exist where injury has been received, without a determination to seek revenge, yet most commonly the offended person is disposed to retaliate, either by art or force: very often the proud and haughty

have been taught to feel that the meanest arm, nerved by this passion, could drag them from fancied security, and place them on a level, as regards bitterness of spirit, with the most wretched.

Revenge has often instigated to assassination, and even now among nations esteemed civilized, the dagger and the poisoned bowl are resorted to with perhaps little more compunction than is felt by our duellists, when they meet to settle points of honor in a method by which nothing can be proved that has any relation to the original dispute.

Those who can govern their anger, and indeed keep all their passions under the subjection of reason, will live much more comfortably, and if other causes affect them equally, longer than the hair-brained creatures of impulse, whose minds seem of little use, save to direct them from one extravagance to another.

“It becomes a man, says the Emperor Antoninus, to love even those who offend him. A man hurts himself, says Epictetus, by injuring me: and what then? Shall I therefore hurt myself by injuring him?—In benefits, says Seneca, it is a disgrace to be outdone; in injuries, to get the better. Another heathen, when he was angry with one by him, said, “I would beat thee; but I am angry.”

“There was one who did Sir Matthew Hale a great injury, who, coming afterwards to him for his advice in the settlement of his estate, he gave it very frankly to him, but would accept of no fee for it; and thereby showed both that he could forgive as a Christian, and that he had the soul of a gentleman in him, not to take money of one who had wronged him so heinously. When he was asked by one how he could use a man so kindly who had wronged him so much, his answer was, “He thanked God, he had learned to forget injuries.”

“A gentleman once went to Sir Eardley Wilmot, under the impression of great wrath and indignation at a real injury he had received from a person high in the political world, and which he was meditating how to resent in the most effectual manner. After relating the particulars, he asked Sir Eardley if he did not think it would be *manty*



to resent it. "Yes," said the knight, "it will be *manly* to resent it, but it will be *God-like* to forgive it." The gentleman declared that this had such an instantaneous effect upon him, that he came away quite a different man, and in a very different temper from that in which he went."

Sudden death from apoplexy, has frequently occurred during violent paroxysms of passion.

### *Fear.*

In looking back through past ages, and in viewing the characteristics of different nations, at the present day, it will be perceived that man is very much the creature of education. Among the Spartans, while they lived in obedience to the laws of Lycurgus, fear was almost unknown; and the Romans for some hundreds of years offered few examples of cowardice.

It is well to observe, that the objects which predominately cause terror in different individuals, are exceedingly diversified. One person is afraid of darkness, another of some particular animal, and a third, perhaps of the water.

These unreasonable fears are often owing to some early impressions that have been deeply established in the mind. But notwithstanding the influence of education in forming the character, there is often a very considerable difference in relation to courage as well as other qualities between those who claim the same parents, and who have received a similar formation of manners in youth. There is generally also an essential difference between the sexes; men being less liable to fear than women: although in numerous instances females have shown degrees of moral courage, which may well stand in comparison with the most dignified examples of fortitude that have been displayed by men.

We subjoin the following valuable observations of Dr. Buchan:

"The influence of fear, both in occasioning and aggravating diseases, is very great. No man ought to be blamed for a decent concern about life; but too great a desire to preserve it is often the cause of losing it. Fear and anxiety, by depressing the spirits, not only dispose us

to diseases, but often render those diseases fatal which an undaunted mind would overcome.

“Sudden fear has generally violent effects. Epileptic fits, and other convulsive disorders, are often occasioned by it. Hence the danger of that practice, so common among young people of frightening one another. Many have lost their lives, and others have been rendered miserable, by frolics of this kind. It is dangerous to tamper with the human passions. The mind may easily be thrown into such disorder as never again to act with regularity.

“But the gradual effects of fear prove most hurtful.—The constant dread of some future evil, by dwelling upon the mind, often occasions the very evil itself.

“It seldom happens that two or three women in a great town die in child-bed, but their death is followed by many others. Every woman of their acquaintance who is with child dreads the same fate, and the disease becomes epidemical by the mere force of imagination. This should induce pregnant women to despise fear and by all means to avoid those tattling gossips who are continually buzzing in their ears the misfortunes of others. Every thing that may in the least alarm a pregnant or child-bed woman, ought with the greatest care to be guarded against.”

### *Of Grief.*

Dr. Buchan remarks, that “Grief is the most destructive of all the passions. Its effects are permanent; and when it sinks deep into the mind, it generally proves fatal. Anger and fear being of a more violent nature, seldom last long; but grief often changes into a fixed melancholy, which preys upon the spirits, and wastes the constitution.

“No person can prevent misfortunes in life; but it shows true greatness of mind to bear them with serenity. Many persons make a merit of indulging grief, and when misfortunes happen, they absolutely refuse all consolation, till the mind, overwhelmed with melancholy, sinks under the load. Such conduct is not only destructive to health, but inconsistent with reason, religion, and common sense.

"It is utterly impossible that any person of dejected mind should enjoy health. Life indeed may be dragged out for a few years; but whoever would live to a good old age, must be good humoured and cheerful. This is not altogether in our power; yet our temper of mind, as well as our actions, depend greatly upon ourselves.

"The body cannot be healthy unless it be exercised; neither can the mind. Indolence nourishes grief. When the mind has nothing else to think of but calamities, no wonder that it dwells there. Few people who pursue business with attention are hurt by grief. Instead therefore of abstracting ourselves from the world or business when misfortunes happen, we ought to engage in it with more than usual attention, to discharge with double diligence the functions of our station, and to mix with friends of a cheerful and social temper.

"Innocent amusements are by no means to be neglected. These, by leading the mind insensibly to the contemplation of agreeable objects, help to dispel the gloom which misfortunes cast over it."

Mankind are frequently deceived in the estimate they form of the sufferings endured by persons under the pressure of grief.

Light and frivolous minds vent all their feelings, and often with a degree of affectation, when it appears, in the world's eye, creditable to lament on an occasion of bereavement; but such seldom experience very permanent pain: the overflowing of their feelings and tears is like a shower in April, which leaves the face of nature calm and serene; whilst those who have a greater degree of command over their external demeanour, and whose feelings are at the same time more delicate and acute, often smother their internal sensations and present a composed countenance to others, when sorrow is undermining the very principles of life itself.

These are his portion—but if join'd to these  
Gaunt Poverty should league with deep Disease,  
If the high Spirit must forget to soar,  
And stoop to strive with Misery at the door,

To sooth Indignity—and face to face  
 Meet sordid Rage—and wrestle with Disgrace,  
 To find in Hope but the renew'd caress,  
 The serpent-fold of future Faithlessness,—  
 If such may be the ills which men assail,  
 What marvel if at last the mightiest fail!  
 Breasts to whom all the strength of feeling given  
 Bear hearts electric—charged with fire from Heaven.  
 Black with the rude collision, inly torn,  
 By clouds surrounded, and on whirlwinds borne,  
 Driven o'er the lowering atmosphere that nurst  
 Thoughts which have turn'd to thunder—scoreh—and burst.

BYRON's *Monody on the Death of Sheridan.*

We have already offered, in page 42, some observations applicable to the treatment of grief and melancholy, and will here only add to the excellent advice of Dr. Buchan, by remarking, that a change of scenes and a succession of new objects, with such an engagement of the mind as to prevent it from brooding over the past, will frequently afford a gradual releasement from feelings, which if indulged or even tolerated without resistance, sometimes cause insanity, and often that despondence and want of energy in the mind, which is termed “a broken heart,” and which leads with certainty to an untimely grave.

The imprisoned Linnet brooks his cage,  
 The captive Eagle dies for rage.

BYRON.

### *Of Hope.*

But thou, O Hope! with eyes so fair,  
 What was thy delighted measure?  
 Still it whisper'd promised pleasure,  
 And bade the lovely scenes at distance hail.  
 Still would her touch the strain prolong;  
 And from the rocks, the woods, the vale,  
 She call'd on Echo still through all her song:  
 And where her sweetest theme she chose,  
 A soft responsive voice was heard at every close;  
 And Hope, enchanted, smil'd and wav'd her golden hair.

COLLINS.



There is a buoyancy in the spirit of man that induces him to believe it possible, to obtain those ends which he esteems desirable; and scarcely can all the disappointments of life, destroy the influence of Hope. If an expectation fails, self-love frequently assists in paliating unpleasant circumstances, so as to lessen the mortification, and some other delusory object is pursued with equal eagerness.

“There are few people in the world, who do not form in their minds agreeable plans of happiness, made up of future flattering prospects, which have no foundation except in their own fancies. This disposition of mind, which is so general among mankind, is also one of the principal causes of their immoderate desire to live. Some have questioned whether any mortal were ever so happy as to choose to live his life over again, on condition of passing through all the events through which he had gone from his birth to his last hour. Without investigating this problem, I venture to affirm, that mankind would be much less attached to the world, if they did not flatter themselves with the hope of enjoying more pleasure than they had hitherto experienced. A child fancies, that, as soon as he arrives at a certain stature, he shall enjoy more pleasure than he hath enjoyed in his childhood; and this is pardonable in a child. The youth persuades himself that men, who are what they call settled in the world, are incomparably more happy than young people can be at his age. While we think ourselves condemned to live single, solitude seems intolerable; and when we have associated ourselves with others, we regret the happy days we spent in the tranquility of solitude. Thus we go on from fancy to fancy, and from one chimera to another, till death arrives, subverts all our imaginary projects of happiness, and makes us know by our own experience, what the experience of others might have fully taught us long before, that is, that the whole world is vanity; that every state, all ages, and all conditions, have inconveniences peculiar to themselves, and one which is common to them all; I mean a character of disproportion to our hearts; so that, by changing our situation, we often do no more than change our kind of infelicity.”—SAURIN.

Without the expectation of future good, mankind would have no stimulus to exertion: indeed, all the opposite and contradictory passions and impulses which men possess, are necessary and useful in their several modes of operation.

To destroy the passions, is to destroy the man: the most valuable exemplification of wisdom, is shown in directing properly their energies and preventing them from precipitating the rational mind into delusion or guilt.

Hope sustains the wanderer in the desert, the seaman through the storm, and, judiciously encouraged, smooths the pillow of sickness: even when earthly expectations vanish, it points to unknown realms, where neither care nor sorrow can enter.

Eternal Hope! when yonder spheres sublime  
Pealed their first notes to sound the march of Time,  
Thy joyous youth began—but not to fade.—  
When all the sister planets have decayed;  
When wrapt in fire the realms of ether glow,  
And Heaven's last thunder shakes the world below;  
Thou, undismayed, shalt o'er the ruins smile,  
And light thy torch at Nature's funeral pile!

CAMPBELL.

### *Of Joy.*

Life is represented by the poet as affording “large draughts of ill, with drops of joy between.” Experience shows that joy is not felt by mortals, for any length of time, in an unmixed state. Occurrences deemed felicitous, may produce gladness and gaiety for a short period, but man is soon reminded by the intrusion of some care, that “bliss on earth in vain is sought.” Sudden and unexpected joy often causes swoonings, and even death: therefore caution should be used in communicating very pleasing tidings, to persons of delicate sensibility, and to those whose systems are debilitated by disease.

“Aulus Gellius mentions a remarkable instance of the effect of accumulated joy. Diagora had three sons, who were all crowned on the same day as victors; the one as

a pugilist, the other as a wrestler, and the third in both capacities. The sons carried their father on their shoulders through an incredible number of spectators, who threw flowers by handfuls on him, and applauded his glory and good fortune. But, in the midst of all the congratulations of the populace, he died in the arms and embraces of his sons."

"Livy also mentions an instance of an aged matron, who, while she was in the depth of distress, from the tidings of her son having been slain in battle, died in his arms, in the excess of joy, upon his safe return."

A tranquil and cheerful state of mind is more to be coveted than violent emotions, which if they are not at the time injurious, always leave behind them a depression of spirits, equal in proportion to the past excitement.

These violent delights have violent ends,  
And in their triumph die. The sweetest honey  
Is loathsome in its own deliciousness,  
And in the taste confounds the appetite.

*Romeo and Juliet, Act II. Sc. 6.*

### *Of Religious Melancholy.*

On this subject we quote the observations of Dr. Buchanan, without comment.

"Many persons of a religious turn of mind behave as if they thought it a crime to be cheerful. They imagine the whole of religion consists in certain mortifications, or in denying themselves the smallest indulgence, even of the most innocent amusements. A perpetual gloom hangs over their countenances, while the deepest melancholy preys upon their minds. At length the fairest prospects vanish, every thing puts on a dismal appearance, and those very objects which ought to give delight, afford nothing but disgust. Life itself becomes a burden, and the unhappy wretch, persuaded that no evil can equal what he feels, often puts an end to his miserable existence.

"It is a great pity that ever religion should be so far perverted, as to become the cause of those very evils which it was designed to cure. Nothing can be better calculated than true religion, to raise and support the mind of

its votaries under every affliction that can befall them. It teaches men that even the sufferings of this life are preparatory to the happiness of the next; and that all who persist in a course of virtue shall at length arrive at a complete felicity.

“Persons whose business it is to recommend religion to others, should beware of dwelling too much on gloomy subjects. That peace and tranquillity of mind, which true religion is calculated to inspire, is a more powerful argument in its favor than all the terrors that can be uttered. Terror may, indeed, deter men from outward acts of wickedness, but can never inspire them with that love of God, and real goodness of heart, in which alone true religion consists.

“We remark, in conclusion, that the best way to counteract the violence of any passion, is to keep the mind closely engaged in some useful pursuit.”



## ON THE PRESERVATION OF HEALTH.

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*Of Wet Feet.*

Even wet feet often occasion fatal diseases. The colic, inflammations of the breast and of the bowels, consumptions, cholera morbus, &c. are often occasioned by wet feet. Habit will, no doubt, render this less dangerous; but it ought as far as possible, to be avoided. The delicate, and those who are not accustomed to have their clothes or feet wet, should be peculiarly careful to dry them as soon as possible after exposure, and to put on dry stockings. The practice of washing the feet, after they have been exposed to wet, with any kind of ardent spirits, is dangerous, as it checks the perspiration.

The advice of the celebrated Boerhaave was, "Keep the head cool, and the feet warm, and defy the physician."

*Of Damp Beds.*

Beds become damp, either from their not being used, standing in damp houses, or in rooms without fire, or from the linen not being dry when laid on the bed. Scarcely any thing is more to be dreaded by travellers than damp beds. When a traveller, cold and wet, arrives at an inn, he may by means of a good fire, warm diluting liquor, and a dry bed, have the perspiration restored; but if he be put into a cold room, and laid in a damp bed, it will be more obstructed, and the worst consequences may ensue. Travellers should avoid inns which are noted for damp beds, as they would a house infected with the plague, as no man, however robust, is proof against the danger arising from them.

But inns are not the only places where damp beds are to be met with. Beds kept in private families for the reception of strangers, are often equally dangerous. All

kinds of linen and bedding, when not frequently used, become damp. How then is it possible that beds, which are not slept in above two or three times a year, should be safe? Nothing is more common than to hear people complain of having caught cold by changing their bed. The reason is obvious: were they careful never to sleep in a bed but what was frequently used, they would seldom find any ill consequences from a change.

Nothing is more to be dreaded by a delicate person on a visit, than being laid in a bed which is kept on purpose for strangers.—That ill-judged piece of complaisance becomes a real injury. In inns, where the beds are used almost every night, nothing else is necessary than to keep the rooms well seasoned by frequent fires, and the linen dry.

Linen, especially if it has been washed in winter, ought not to be used till it has been exposed for some time to the fire; nor is this operation less necessary for linen washed in summer, provided it has lain for any length of time. The caution is more needed, as travellers are often exceedingly attentive to what they eat or drink at an inn, yet pay no regard to a circumstance of much more importance.

An obstruction of the sensible or insensible perspiration is the source of a fearful train of disorders: many, especially young men in the country, by reposing on the damp ground when overheated in the ardent summer months, contract rheumatisms, fevers, or colds, which essentially injure their constitutions.

Insensible perspiration is generally reckoned the greatest of all the discharges from the human body. It is of so great importance to health, that few diseases attack us while it goes properly on; but when it is obstructed, the whole frame is soon disordered. This discharge, however, being less perceptible than any of the rest, is consequently less attended to. Hence many diseases often proceed from obstructed perspiration before we are aware of its having taken place.

On examining patients, we find most of them impute their diseases either to violent colds which they had caught, or to slight ones which had been neglected.

*Sudden Transitions, and Drinking Cold Water, when Hot.*

The perspiration is commonly obstructed by sudden transitions from heat to cold. Colds are seldom caught, unless when people have been too much heated. Heat quickens the circulation, and increases the perspiration; but when these are suddenly checked, the consequences must be bad. It is indeed impossible for labourers not to be hot upon some occasions: but it is generally in their power to let themselves cool gradually, to put on their clothes when they leave off work, to make choice of a dry place to rest themselves in, and to avoid sleeping in the open fields.

It is very common for people when hot, to drink freely of cold water. This conduct is extremely dangerous. Thirst indeed is hard to bear, and the inclination to gratify that appetite, frequently gets the better of reason, and often makes us do what our judgment disapproves. Every person, however, knows if his horse be permitted to drink his belly full of cold water, after violent exercise, and is immediately put into the stable, or suffered to remain at rest, that it will kill him. This the utmost care is taken to prevent. It would be well if men were equally attentive to their own safety.

Thirst may be quenched many ways without swallowing large quantities of cold liquor. The fields afford a variety of acid fruits and plants, the very chewing of which would abate thirst. Water kept in the mouth for some time, and spit out again, if frequently repeated, will have the same effect. When a person is extremely hot, a mouthful of brandy or other spirits, if it can be obtained, ought to be preferred to any thing else. But if any one has drank freely of cold liquor, he ought to use exercise for some time.

It would be tedious to enumerate all the bad effects which flow from drinking cold liquors when the body is hot. Sometimes this has occasioned immediate death. Hoarseness, quinsies, and fevers of various kinds, are its common consequences. Neither is it safe when warm, to eat freely of raw fruits, salads, or the like. These, indeed, have not so sudden an effect upon the body as

cold liquors, but they are, notwithstanding, dangerous, and ought to be avoided.

Sitting in a warm room, and drinking hot liquors till the pores are quite open, and immediately going into the cold air, is extremely dangerous. Colds, coughs, and inflammations of the breast, are the usual effects of this conduct; yet nothing is more common than for people, after they have drank warm liquors for several hours, to walk or ride a number of miles in the coldest night, or to ramble about in the streets.

People imagine if a good fire is made in a room after it has been washed, that there is no danger from sitting in it; but this increases the danger. The evaporation excited by the fire generates cold, and renders the damp more active.

People are apt, when a room is hot, to throw open a window, and to sit near it. This is a very dangerous practice. It would be better to sit out of doors than in such a situation, as the current of air is directed against one particular part of the body. Inflammatory fevers and consumptions have often been occasioned by sitting or standing thinly clothed near an open window. Nor is sleeping in a draught of air less to be dreaded. This ought never to be done, even in the hottest season, unless the window is at a distance.

Few things expose people more to catch cold than keeping their own houses too warm: such persons may be said to live in a sort of hot-houses; they can hardly stir abroad to visit a neighbour but at the hazard of their lives. Were there no other reason for keeping houses moderately cool, that alone is sufficient: but no house that is too hot can be wholesome; heat destroys the spring and elasticity of the air, and renders it less fit for the purposes of respiration. Hence it is that consumptions and other diseases of the lungs prove fatal to people who work in forges, glass-houses, and the like.

Some are even so fool-hardy, as to plunge themselves when hot, in cold water. Not only fevers, but madness itself, have frequently been the effect of this conduct. Indeed it looks too like the action of a madman to deserve a serious consideration.



The result of these observations is, that every one ought to avoid, with the utmost attention, all sudden transitions from heat to cold, and to keep the body in as uniform a temperature as possible: or where that cannot be done, to take care to let it cool gradually.

People may imagine that too strict an attention to these things would tend to render them delicate. So far however is this from being our design, that the very first rule proposed for preventing colds is, to harden the body by inuring it daily to the open air.

We will put an end to what relates to this part of the subject, by giving an abstract of the justly celebrated advice of Celsus, with respect to the preservation of health.

“A man,” says he, “who is blessed with good health, should confine himself to no particular rules, either with respect to regimen or medicine. He ought frequently to diversify his manner of living; to be sometimes in town, sometimes in the country; to hunt, sail, indulge himself in rest, but more frequently to use exercise. He ought to refuse no kind of food that is commonly used, but sometimes to eat more, and sometimes less; sometimes to make one at an entertainment, and sometimes to forbear it; to make rather two meals a day than one, and always to eat heartily, provided he can digest it. He should be careful in time of health not to destroy, by excesses of any kind, that vigour of constitution which should support him under sickness.”

### *Of Cleanliness.*

The want of cleanliness is a fault which admits of no excuse. Where water can be had for nothing, it is surely in the power of every person to be clean. The continual discharge from our bodies by perspiration, renders frequent change of apparel necessary. Changing apparel greatly promotes the secretion from the skin, so necessary for health. When that matter which ought to be carried off by perspiration is retained in the body, or re-absorbed from dirty clothes, it must occasion diseases.

Diseases of the skin are frequently owing to a want of cleanliness. They may indeed be caught by infection, or

brought on by poor living, unwholesome food, &c. but they will seldom continue long where cleanliness prevails. To the same cause must we impute the various kinds of vermin which infest the human body, houses, &c. These may always be banished by cleanliness alone, and wherever they abound, we have reason to believe it is neglected.

In places where great numbers of people are collected, cleanliness becomes of the utmost importance. Whatever pretensions people may make to learning, politeness, or civilization, we will venture to affirm, that while they neglect cleanliness, they are in a state of barbarity.

In ancient Rome the greatest men did not think cleanliness an object unworthy of their attention. Pliny says, the *CLOACÆ*, or common sewers for the conveyance of filth and nastiness from the city, were the greatest of all the public works; and bestows higher encomiums upon Tarquinius, Agrippa, and others who made and improved them, than on those who achieved the greatest conquests.

The Jews during their encampments in the wilderness, received particular instructions with respect to cleanliness. Indeed the whole system of laws delivered to that people has a manifest tendency to promote cleanliness. Whoever considers the nature of their climate and the diseases to which they were liable, will see the propriety of such laws.\*

It is remarkable that, in most eastern countries, cleanliness makes a great part of their religion. The Mahometan as well as the Jewish religion enjoins various bathings, washings, and purifications. No doubt these might be designed to represent inward purity; but they were at the same time calculated for the preservation of health. However whimsical these washings may appear to some, few things would tend more to prevent diseases than a proper attention to many of them.

Were people careful to bathe their feet and legs in luke-warm water at night, after being exposed to cold

\* Thou shalt have a place also without the camp, whither thou shalt go forth abroad; and thou shalt have a paddle upon thy weapon: and it shall be when thou shalt ease thyself abroad, thou shalt dig therewith, and shall turn back, and cover that which cometh from thee, &c.

or wet through the day, they would seldom experience the ill effects which often proceed from these causes.

Many diseases may be cured by cleanliness alone; most of them might be mitigated by it; and, where it is neglected, the slightest disorders are often changed into the most malignant. The same mistaken care which prompted people to prevent the least admission of fresh air to the sick, seems to have induced them to keep them dirty. Both these destructive prejudices will, we hope, be soon eradicated.

Cleanliness is certainly agreeable to our nature. We cannot help approving it in others, even though we should not practice it ourselves. It sooner attracts our regard than even finery itself, and often gains esteem where that fails. It is an ornament to the highest as well as to the lowest station, and cannot be dispensed with in either.

In well ordered merchant vessels, and more particularly in vessels of war, it is considered essential that every individual contributes in assisting to remove all dirt and filth: and cleanliness in person and dress, is particularly enjoined. This example is strongly recommended to families, as well as to those who navigate our waters.

### *Of the Common Evacuations, especially Stool and Urine.*

The principal évacuations from the human body are those by *stool*, *urine*, and *insensible perspiration*.—of the last we have already written. None of these can be long obstructed without impairing the health. When that which ought to be thrown off from the body is long retained, it not only occasions a too great fulness of the vessels, but acquires qualities which are hurtful to the system.

### *Of Evacuations by Stool.*

Few things conduce more to health than keeping the body regular.

When costiveness is suffered to prevail, health becomes injured; and when the contents of the bowels are too soon discharged, the body is not sufficiently nourished. A medium is therefore to be desired, which can often be obtained by regularity in diet, sleep, and exercise.

Persons who eat and drink at irregular hours, and who eat various kinds of food, and drink of several different liquors at every meal, have no reason to expect either that their digestion will be good, or their discharges regular.

Irregularity in eating and drinking disturbs every part of the animal economy, and never fails to occasion diseases. Either too much or too little food will have this effect. The former indeed generally occasions looseness, and the latter costiveness; but both have a tendency to hurt the health.

It would be difficult to ascertain the exact number of stools which may be consistent with health, as these differ in the different periods of life, in different constitutions, and even in the same constitution under a different regimen of diet, exercise, &c. It is, however, generally allowed, that one stool a day is sufficient for an adult, and that less is hurtful. But this, like most general rules, admits of many exceptions. I have known persons in perfect health, says Dr. Buchan, who did not go to stool above once a week. Such a degree of costiveness, however, is not safe; though the person who labors under it, may for some time enjoy tolerable health, yet at length it will occasion disease.

One method of procuring a stool every day is to rise betimes, and go abroad in the open air. Not only the posture in bed is unfavorable to regular stools, but also the warmth. This, by promoting the perspiration, lessens all the other discharges.

The method recommended for this purpose by Mr. Locke is likewise very proper; viz: *to solicit nature, by going to stool every morning, whether one has a call or not.*—Habits of this kind may be acquired, which will in time become natural.

Persons who have frequent recourse to medicines for preventing costiveness, seldom fail to ruin their constitutions. Purging medicines frequently repeated weaken the bowels, hurt the digestion, and every dose makes way for another, till at length they become as necessary as daily bread. Those who are troubled with costiveness ought rather, if possible, to remove it by diet than drugs.



Persons who are troubled with an habitual looseness, ought likewise to suit their diet to the nature of their complaint. They should use food which braces and strengthens the bowels, and which is rather of an astringent quality, as wheat bread made of the finest flour, cheese, eggs, rice boiled in milk, &c. Their drink should be red port, claret, brandy, and water in which toasted bread has been boiled, and the like.

As an habitual looseness is often owing to an obstructed perspiration, persons affected with it ought to keep their feet warm, to wear flannel next their skin, and take every other method to promote the perspiration.

On this and several other similar interesting subjects, we borrow very freely from Dr. Buchan, the more especially as we conceive that nothing new can be written to advantage; and moreover, find by examination that the celebrated Doctor Robert Thomas, of Salisbury, in England, in his *Domestic Medicine*, an edition of which, revised by professor Hosack, of New York, lies before us, has given on these subjects the same ideas, for which we are indebted to Dr. Buchan, and often in nearly the same words.

### *Of Urine.*

So many things tend to change both the quantity and appearance of urine, that it is very difficult to lay down any determined rules for judging of either.

It has long been an observation among physicians, that the appearances of the urine are very uncertain, and very little to be depended on. No one will be surprised at this, who considers how many ways it may be affected, and consequently have its appearance altered. The passions, the state of the atmosphere, the quantity and quality of the food, the exercise, the clothing, the state of the other evacuations, and numberless other causes, are sufficient to induce a change both in the quantity and appearance of the urine.

Dr. Cheyne says, the urine in health is equal to three-fourths of the liquid part of our aliment. We believe it to be considerably less: different degrees of perspiration

alter the proportion, and likewise different kinds of aliment afford very different quantities of urine. For these and other reasons, no rule can be given for judging of the precise quantity of urine which ought to be discharged, yet a person of common sense will seldom be at loss to know when it is in either extreme.

Both the secretion and discharge of urine are lessened by a sedentary life, sleeping on beds that are too soft and warm, food of a dry and heating quality, liquors which are astringent and heating, as red port, claret, and such like. Those who have reason to suspect that their urine is in too small quantity, or who have any symptoms of the gravel, ought not only to avoid these things, but whatever they find has a tendency to lessen its quantity.

When the urine is too long retained, it is not only re-absorbed, or taken up again into the mass of fluids, but by stagnating in the bladder it becomes thicker, the more watery parts passing off first, and the more gross and earthy remaining behind, the formation of stones and gravel in the bladder is promoted. We frequently find that indolent and sedentary people are much more liable to these diseases than persons of a more active life.

Many persons have lost their lives, and others have brought on tedious and even incurable diseases by retaining their urine too long, from a false delicacy. When the bladder has been over-distended, it often loses its power of action altogether, or becomes paralytic, by which means it is rendered unable either to retain the urine, or expel it properly. The calls of nature ought never to be postponed. Delicacy is doubtless a virtue, but that can never be reckoned true delicacy, which induces any one to risk his health or hazard his life.

But the urine may be in too great as well as too small a quantity. This may be occasioned by drinking large quantities of weak watery liquors, by the excessive use of alkaline salts, or any thing that stimulates the kidneys. This disorder very soon weakens the body, and induces atrophy or a general wasting away of the flesh and strength, and is difficult to cure.

*Of Sleep and Watching.*

Sleep, as well as diet, ought to be duly regulated. Too little sleep weakens the nerves, exhausts the spirits, and occasions diseases; and too much renders the mind dull, the body gross, and disposes to apoplexies, lethargies, and other complaints of a similar nature. A medium ought therefore to be observed; but this is not easy to fix. Children require more sleep than grown persons, the laborious than the idle, and such as eat and drink freely, than those who live abstemiously. Besides the real quantity of sleep cannot be measured by time; as one person will be more refreshed by five or six hours' sleep, than another by eight or ten.

Children may always be allowed to take as much sleep as they please; but for adults, seven or eight hours is certainly sufficient, and no one ought to exceed eight. Those, at least adults, who lie in bed more than eight hours may slumber, but they can hardly be said to sleep. The best way to make sleep sound and refreshing is to rise betimes. The custom of laying in bed for nine or ten hours, not only makes the sleep less refreshing, but greatly weakens the constitution.

Nature points out night as the proper season for sleep. Few things more certainly destroy the constitution than night-watching.

To make sleep refreshing, the following things are requisite: first, to take sufficient exercise in the open air; to avoid powerful stimulants, to eat a light supper; and lastly, to lie down with a mind as cheerful and serene as possible.

Too much exercise will prevent sleep, as well as too little. We seldom, however, hear the active and laborious complain of restless nights. It is the indolent and slothful who generally make these complaints. Is it any wonder that a bed of down should not be refreshing to a person who sits all day in an easy chair? A great part of the pleasure of life consists in alternate rest and motion; but they who neglect the latter can never relish the former. The laborer enjoys more true luxury in plain

food and sound sleep, than is to be found in sumptuous tables and downy pillows, where exercise is wanting.

That light suppers cause sound sleep, is true even to a proverb. Many persons, if they exceed the least at that meal, are sure to have uneasy nights; and, if they fall asleep, the load and oppression on their stomach and spirits occasion frightful dreams, broken and disturbed repose, the night-mare, &c. There are indeed some people who cannot sleep, unless they have eaten some solid food at night, but this does not imply the necessity of a heavy supper besides these are generally persons who have accustomed themselves to this method, and who do not take a sufficient quantity of solid food and exercise.

Nothing more certainly disturbs our repose than anxiety. When the mind is not at ease, one seldom enjoys sound sleep. This greatest of human blessings flies the wretched, and visits the happy, the cheerful, and the gay.

Tir'd nature's sweet restorer, balmy sleep !

He, like the world his ready visits pays

Where Fortune smiles ; the wretched he forsakes :

Swift on his downy pinions flies from wo,

And lights on lids unsullied with a tear.

YOUNG.

Many, by indulging grief and anxious thought, have banished sound sleep so long, that they could never afterwards enjoy it.

Sleep, when taken in the fore-part of the night, is generally reckoned most refreshing. Whether this be the effect of habit or not, is hard to say ; but as most people are accustomed to go early to bed when young, it may be presumed that sleep, at this season, will prove most refreshing to them ever after. Whether the fore-part of the night be best for sleep or not, surely the fore-part of the day is fittest both for business and amusement.

Men of every occupation, and every situation of life, have lived to a good old age ; nay some have enjoyed this blessing whose plan of living was by no means regular : but it consists with observation, that all very old men have been early risers. This is the only circumstance attending longevity to which I never know an exception, says Dr. Buchan.



There are certain classes of people, especially watermen of every description, who cannot enjoy timely sleep, like landmen, during the night. They, are advised to accustom themselves as much as possible to regularity in the periods of sleeping and watching; and those, particularly, who sleep in exposed situations, are cautioned that the body requires more covering when asleep than when awake, in consequence of the relaxation or cessation of several of its important functions, causing a greater liability to a suppression of the perspiration.

Sleeping on a good matrass is preferable to the use of feather beds; this opinion perhaps will not be very popular, but is sanctioned by many eminent authorities, as well as by our experience, when attending on the sick. In many cases of disease the use of a matrass is highly necessary, by lying on one the consumptive or athmatic patient often finds great relief. In the gravel also and other diseases the same benefit is frequently experienced.

### *Of Clothing.*

Some remarks on the subject of clothing have already been made in an earlier part of this work. We especially advised the use of winter garments sooner in the season than is generally customary, especially in country places. We now recommend that they be not left off too soon in the spring, and that caution be used in changing the mode of apparel.

The clothing ought to be suited to the climate as well as the season of the year. In our country, where there are very frequent alterations in the weather, it has been found, at all times, most advisable, except perhaps during the excessive heats of summer, to wear next the skin, cotton instead of linen: and the use of flannel is strongly recommended, especially to those of delicate constitutions, so long as it can be endured with tolerable comfort. Neither need any one fear becoming less healthy or strong by the use of flannel, for the American seamen, who are surely not effeminate, wear flannel or woollen stuff for shirts almost uniformly during winter, and frequently through the summer, even in hot climates.—

When it is taken off, cotton should be worn, at least for a time, before wearing linen, as the sudden transition from woollen to linen is very often a cause of pleurisy, fever, or some serious affection of the lungs. Woollen stockings or socks are advisable for all, during the fall, winter, and spring months.

That "colds kill more than the plague," is an old observation and a true one. Many of the colds which prove so destructive in this country, are owing to a want of proper clothing, or improvidence in changing clothes. A few warm days in March or April, induce many people to throw off their winter garments, without considering the changeableness of the weather, and they suffer the consequences.

In old age, more clothing is necessary than in youth: many diseases in the latter part of life particularly, proceed from a defect of perspiration. In many cases where the power of medicine had been tried in vain, the patients have been cured by wearing warm woollen clothes and thick shoes.

It can hardly be understood from what we have written, that it has been recommended to wear an unnecessary and cumbrous quantity of apparel; robust persons are able to endure either cold or heat better than the delicate, and the precise quantity of clothes necessary for any one cannot be determined by reasoning. It is entirely a matter of experience, and every man is best able to judge for himself the quantity of clothes necessary to keep him warm.

The foregoing observations, in essential respects, apply as well to women as to men. We do not calculate to reform fashionable follies, unless perhaps it may be in a degree, by persuading to a more reasonable care of health than is generally manifested. Neither do we charge fashionable follies particularly to the fair sex; but females have always claimed peculiar privileges, in relation to dress—one is, that of exposing their health for the sake of appearances. Indeed, it is not unusual, even in the western country, for many ladies who wear very comfortable clothing on common occasions at home,

to assume a much lighter and more fantastic garb on occasions of ceremony.

Clothes often become hurtful by their being made subservient to the purposes of pride or vanity; mankind in all ages, seem to have considered clothes in this view: accordingly their fashion and figure have been continually varying, with very little regard either to health, climate, or convenience.

It is often even attempted to mend the human shape by dress. All attempts of this nature are highly pernicious. The most destructive of them all is that of squeezing the stomach and bowels into as narrow a compass as possible, in order to procure a fine shape.

By this practice, the action of the stomach and bowels, the motion of the heart and lungs, and almost all the vital functions are injured. Hence proceed indigestions, fainting fits, consumptions, and other complaints so common among females. The feet often also suffer by pressure; this has rendered many persons lame. The size and figure of the shoe ought certainly to be adapted to the foot.

### *Of Exercise.*

It is evident from the structure of the body, that exercise is not less necessary than food for the preservation of health: those who are obliged to labour for daily bread are not only the most healthy, but generally the most happy part of mankind. Industry seldom fails to place them above want, and activity mostly serves them instead of physic. This is peculiarly the case with those who live by the culture of the ground.

The love of activity shows itself very early in man. So strong is this principle, that a healthy youth cannot be restrained from exercise, even by the fear of punishment. Our love of motion is surely a strong proof of its utility. Nature implants no disposition in vain. It seems to be a consistent law, throughout the whole animal creation, that no creature without exercise, can enjoy health, or be able to find subsistence. Every creature, except man, takes as much of it as is necessary. He

alone, and such animals as are under his direction, often deviate from this original law, and they suffer accordingly.

Inactivity never fails to induce an universal relaxation of the system, which disposes the body to innumerable diseases. When the solids are relaxed, neither the digestion nor any of the secretions can be duly performed. In this case the worst consequences frequently ensue. How can those who loll all day on easy chairs, and sleep all night on beds of down, fail to become enfeebled?

Glandular obstructions often proceed from inactivity. These are very obstinate maladies. So long as the liver, kidneys, and other glands, duly perform their functions, health is seldom impaired; but when they fail, nothing can restore it.

Weak nerves are the constant companions of inactivity. Nothing but exercise and open air can brace and strengthen the nerves, or prevent the endless train of diseases which proceed from a relaxed state of these organs. We seldom hear the active or laborious complain of nervous diseases; these are reserved for the sons of ease and affluence. Many have been completely cured of these disorders by being reduced, from a state of opulence, to labour for their daily bread. This plainly points out a source from which nervous diseases flow, and a means by which they may be prevented.

It is absolutely impossible to enjoy health, where the perspiration is not duly carried on: but that can never be the case where exercise is neglected. When the matter which ought to be thrown off by perspiration, is retained in the body, it occasions gout, fevers, rheumatism, and other diseases.

Dr. Cheyne, in his excellent treatise on health, says, that the weak and valetudinary ought to make exercise a part of their religion. We would recommend this not only to the weak and valetudinary, but to all whom business does not oblige to take sufficient exercise, as sedentary artificers, shopkeepers, studious persons, &c. Such ought to use exercise as regularly as they take food. This might generally be done without any interruption of business or real loss of time.



No piece of indolence hurts the health more than the custom of lying in bed too long in the morning. This is a common practice in towns. Many inhabitants do not rise before eight or nine o'clock. The morning air braces and strengthens the nerves, and, in some measure, answers the purpose of a cold bath. Let any one who has been accustomed to lie in bed till eight or nine o'clock, rise by six or seven, spend a couple of hours in walking, riding, or any active diversion without doors, and he will find his spirits cheerful and serene through the day, his appetite keen, and his body braced and strengthened.—Custom soon renders early rising agreeable, and nothing contributes more to the preservation of health.

The inactive are continually complaining of pains of the stomach, flatulencies, indigestions, &c. These complaints, if originating in this cause, are not to be removed by medicines. They can only be cured by a vigorous course of exercise, to which indeed they seldom fail to yield.

Exercise, if possible, ought always to be taken in the open air. When that cannot be done, various methods may be contrived for exercising the body within doors. It is not necessary to adhere strictly to any particular kind of exercise. The best way is to take them by turns, and to use that longest which is most suitable to the strength and constitution. Those kinds of exercise which give action to most of the bodily organs, are always to be preferred, as walking, running, riding, ploughing, or rubbing furniture, &c.

Exercise should never be continued too long. Over fatigue prevents the benefit of exercise, and instead of strengthening the body, tends to weaken it.

Every man should lay himself under some sort of necessity to take exercise. Indolence, like other vices when indulged, gains ground, and at length becomes agreeable. Hence men, who were fond of exercise in the early part of life, have become quite averse to it afterwards. This is the case with most hypochondriac and gouty people, and renders their diseases in a great measure incurable.

Indolence not only occasions diseases, and renders men useless to society, but promotes immorality. To

say a man is idle, is little better than to call him vicious. The mind, if not engaged in some useful pursuit, is constantly in quest of idle pleasures, or impressed with the apprehension of some imaginary evil. From these sources proceed most of the miseries of mankind. Inactivity frustrates the very design of man's creation; whereas an active life is the best guardian of virtue, and the greatest preservative of health.

### *Of Laborious Employments.*

By toil our long-liv'd fathers earn'd their food,  
Toil strung their nerves, and purified their blood.      DRYDEN.

In this country, a great proportion of the population is engaged in laborious, and mostly agricultural, pursuits: such employments are generally healthy; yet the nature of some mechanical occupations, the places where they are carried on, and often peculiarities of climate, which affect more particularly those exposed to the open air, render liable to particular diseases.

Farmers, and the very useful class of our fellow citizens who navigate the rivers, are exposed to all vicissitudes of the weather, which are often great and sudden, they are also obliged to work hard, and to carry heavy burdens.—The diseases to which they are subject, from these causes, are often violent and inflammatory.

Carrying heavy burdens, is generally the effect of mere laziness, which prompts people to do at once what should be done at twice. Sometimes this proceeds from vanity or emulation. Hence it is, that the strongest men are most commonly hurt by heavy burdens, hard labor, or feats of activity. It is rare to find one who boasts of his strength without a rupture, a spitting of blood, or some other disease, which he reaps as the fruit of his folly. One would imagine, the daily instances we have, of the fatal effects of carrying great weights, running, wrestling, and the like, would be sufficient to prevent such practises.

Persons engaged in some occupations are necessarily obliged to use at times a great exertion of strength, such as blacksmiths, carpenters, &c. These should never exert their strength to the utmost, nor work too long. When

the muscles are violently strained, frequent rest is necessary, in order that they may recover their tone; without this, the strength and constitution will soon be worn out, and a premature old age induced.

The erysipelas, or St. Anthony's fire, is a disease very incident to the laborious. It is occasioned by whatever gives a sudden check to the perspiration, as drinking cold water when the body is warm, wet feet, keeping on wet clothes, sitting or lying on the damp ground, &c. It is impossible for those who labor without doors always to guard against these inconveniences: but it is known from experience, that their ill consequences might often be prevented by proper care: complaints of the bowels are often occasioned by the same causes as the erysipelas.

Inflammations, whitloes, and other diseases of the extremities, are likewise common among those who labor without doors.

Working people are apt in the hot season to lie down and sleep in the sun. This practice is so dangerous, that they often wake in a burning fever. These ardent fevers, which prove so fatal about the end of the summer and beginning of autumn, are frequently occasioned by this means. When laborers leave off work, *which they ought always to do during the heat of the day*, they should go home, or at least, get under some cover, where they may repose themselves in safety.

Many people follow their employments in the fields from morning till night, without eating any thing. This cannot fail to hurt their health. However homely their fare be, they ought to have it at regular times; and the harder they work, the more frequently they should eat.

Labourers are often hurt by a foolish emulation, which prompts them to vie with one another, till they overheat themselves to such a degree as to occasion a fever, or even to drop down dead. Such conduct is not only highly censurable in itself, being a species of self murder, but often involves helpless families in its ruinous consequences.

*Of Food.*

The food most commonly used in this country consists chiefly of flesh, bread, and vegetables. Unwholesome food and irregularities in diet, are the causes of many diseases. An attention to diet is also of great importance in sickness, as will be explained elsewhere.

It is not possible to ascertain the exact quantity or quality of food proper for every age, sex, or constitution, neither is a scrupulous nicety in this, necessary. The best rule is to avoid extremes: nature teaches every creature when it has enough, and the calls of hunger and thirst will inform when more is necessary.

Unwholesome food, such as meat that has become tainted, or flour that is spoiled, should be avoided. It need scarcely be mentioned, that the flesh of such animals as die of themselves, or are found to be diseased after being slaughtered, ought not to be eaten. The injunction given to the Jews not to eat any creature which died of itself, seems to have a strict regard to health.

Much more food is generally eaten than is necessary to support health and strength, although there is a great difference in the quantities absolutely required by different individuals: and a great deal depends on early and acquired habits. There is no doubt but that much injury is sustained, especially by young people, in consequence of overloading the stomach with strong food. We would recommend, however, a nourishing diet.

Hipocrates remarked that "a moderate quantity of food nourishes the body best."

An excellent rule by which to judge of the wholesomeness of any article of diet, is to ascertain whether it proves easy of digestion and agrees with the constitution; for the taste frequently becomes vitiated by habit. Thus although salt used with discretion, is wholesome and very beneficial in the preparation of food, yet meat very much salted becomes hardened, its juices are destroyed, and it is not easily digestible, neither is it nutritious; this is particularly exemplified in very salt pickled pork: nevertheless some are very fond of it in that state.



A difficulty, which prevents particularizing, with regard to articles of diet is, that we find some acquiring vigor from substances which would be entirely improper for others, so much depends upon habits of life.

There is, however, one great mistake very generally made. Meat of every description is mostly cooked too much; it should certainly be sufficiently cooked through, but not overdone, so as to consume the animal juices: when this is the case, it affords much less nourishment than when properly prepared, and is far from being so easily digestible:—excessive seasoning is certainly hurtful.

Much in relation to health depends on the preparation of bread: this should be well baked, and never used in the form of a heavy, sodden, unbaked lump; few things more certainly cause indigestion.

Diet should not be too uniform: the constant use of one kind of food may have bad effects. Nature has provided a great variety of aliment for man, and has likewise given him an appetite for different kinds of food.

In the first period of life, our food ought to be light but nourishing, and frequently taken. Food that is more solid is most proper for the state of manhood. The diet suited to the last period of life, when nature is on the decline, approaches nearly to that of the first: it should be lighter and more juicy than that of middle age, and also more frequently taken. Food, if possible should be taken at regular intervals, and light suppers will be found advantageous to health.

Ripe fruit is provided for the use of man, and used in moderation, is certainly beneficial.

The liquid part of our aliment, likewise claims our attention. Water is the basis of most liquors, and composes a principal part of our solid food. Good water is of the greatest importance in diet. The best water is that which is most pure and free from any mixture of foreign bodies. Water takes up parts of most bodies with which it comes in contact; by this means it is often impregnated with metals or minerals of a poisonous nature. When water is impregnated with foreign bodies, it generally appears by its weight, colour, taste, smell, heat, or some other sensible quality: it is best to choose for use

such water as is lightest and without any particular colour, taste, or smell.

The common methods of rendering water clear by filtering it, or soft by exposing it to the sun or air, are so generally known that it is unnecessary to spend time in explaining them. We shall only in general advise, to avoid waters which stagnate in small lakes or ponds, as such waters often become putrid in consequence of the corruption of animal or vegetable substances in them, or from other causes.

Even cattle frequently suffer by drinking, in dry seasons, water which has stood a long time without being supplied by springs, or freshened with showers. It has been mentioned, in a former chapter, that wells and springs should be kept clear; they ought also to have a free communication with the air.

### *Of Unwholesome Air.*

Air, as well as water, takes up parts of most bodies with which it comes in contact, and is often so replenished with those of a noxious quality, as to occasion immediate death.

Wherever great numbers of people are crowded into one place, if the air has not a free circulation, it soon becomes unwholesome. Hence it is, that delicate persons are so apt to turn sick or faint in crowded churches, assemblies, or any place where the air is injured by breathing, fires, candles, or the like.

Wherever air stagnates long, it becomes unwholesome. The various methods which luxury has invented to make houses close and warm, contribute not a little to the causes of disease. No house can be wholesome, unless the air has a free passage through it. For which reason, houses ought daily to be ventilated by opening opposite windows and admitting a current of fresh air into every room. Beds, instead of being made up as soon as people rise out of them, ought to be exposed to the fresh air through the day.

Air which stagnates in mines, wells, cellars, &c. is extremely noxious. Such air is to be avoided as the most

deadly poison. It often kills, almost as quickly as lightning. For this reason, people should be very cautious in opening cellars that have been long shut, or in going down into deep wells or pits, especially if they have been kept close covered.

We frequently hear accounts of persons losing their lives by going into deep wells, and other places where the air stagnates; these accidents might be prevented by only letting down a lighted candle before them, and stopping when they perceive it go out; yet this precaution, simple as it is, is too seldom used.

ON DRUNKENNESS.

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ON this subject our reflections cannot be too serious; when we consider that men of the brightest genius, and others whose minds were deeply imbued with learning, have sunk the victims of intemperance; when we are conscious also, that men capable of the most generous affections, have given up all that was dear to them by indulgence in this deplorable perversion of the human faculties.

Drunkenness is a vice, but it is also a misfortune; and therefore the situation of its victims often demands a measure of pity. When the human system becomes accustomed to the influence of high excitement, it is impossible to abstract that excitement without pain, misery, and often death: the mind also, by the use of intoxicating liquors, becomes measurably alienated from a healthy state: these are causes why the wretched drunkard is unable to stop in the downhill course to ruin.

The practice of drunkenness is coeval with the earliest records of history; at least, wherever intoxicating liquors have been prepared, there have been found drunkards.

Drunkenness claims its victims by thousands;—and, unfortunately, not to them only are the consequences of its influence confined; the innocent too often feel its direful effects—for helpless families, mourning wives, widows, and orphans, every day attest the power of this monster.

Rosseau observes, that temperance and exercise are the two best physicians in the world. He might have added, that if these were duly regarded, there would be little occasion for any other. Temperance may justly be called the parent of health; yet numbers of mankind act as if they thought diseases and death



too slow in their progress, and by intemperance and debauch seem as it were to solicit their approach.

The danger of intemperance appears from the very construction of the human body. Health depends on that state of the solids and fluids which fits them for the due performance of the vital functions; and while these go regularly on, we are sound and well; but whatever disturbs them necessarily impairs health. Intemperance never fails to disorder the whole animal economy; it hurts the digestion, relaxes the nerves, renders the different secretions irregular, and occasions numberless diseases.

The best things become hurtful, nay, destructive, when carried to excess. Hence we learn, that the highest degree of human wisdom consists in regulating our appetites and passions so as to avoid all extremes. It is that chiefly which entitles us to the character of rational beings. The slave of appetite will ever be the disgrace of human nature.

The author of nature hath endued us with various passions—such as those intended for the propagation of our species, the preservation of the individual, &c. Intemperance is the abuse of these passions; and moderation consists in the proper regulation of them. Men, not contented with satisfying the simple calls of nature, create artificial wants, and are perpetually in search after something that may gratify them; but imaginary wants can never be gratified. Nature is content with little; but luxury knows no bounds. The epicure, the drunkard, and the debauchee seldom stop in their career till their money or their constitution fails: then, indeed, they generally see their error when too late.

Families are not only reduced to misery, but are often extirpated, by intemperance. Nothing tends so much to prevent propagation, and shorten to the lives of children, as the intemperance of parents. Even states and empires feel the influence of luxurious habits, and rise or fall as they prevail.

Every act of intoxication puts nature to the expense of a fever, in order to discharge the poisonous draught.—When this is repeated almost every day, it is easy to foresee the consequences. That constitution must be strong in-

deed, which is able to hold out under a daily fever; but fevers occasioned by drinking, do not always go off in a day; they frequently end in an inflammation of the breast, liver, or brain, and produce fatal effects.

Though the drunkard falls not by an acute disease, he seldom escapes those of a chronic kind. Intoxicating liquors, when used to excess, weaken the bowels, and spoil the digestion; they destroy the power of the nerves, and occasion paralytic and convulsive disorders; they likewise heat the blood, and render it unfit for circulation, and the nourishment of the body. Hence obstructions, atrophy\*, dropsies, and consumption of the lungs. Diseases of this kind when brought on by hard drinking, seldom admit of a cure.

The liver, especially in this country, appears to be more particularly liable to disease from the use of strong liquors, than any other part of the system, except the immediate organs of digestion.

Many people injure their health by drinking, who seldom get drunk. The habit of taking drams, although its effects be not so violent, is not less pernicious.—When the vessels are kept constantly full and upon the stretch, the different digestions cannot be duly performed. Hence most people of this character are afflicted with the gout, the gravel, ulcerous sores in the legs, &c. If these disorders do not appear, they are seized with low spirits, hypochondriacal affections, and other symptoms of indigestion.

The action of ardent spirits, when taken in a large quantity, and in a raw state, assails at once the nervous system, and paralyzes, in a greater or less degree, the very basis of vital energy: apoplexy may ensue, and in short, often is induced, by the stomach and blood being surcharged and stimulated with wine or distilled liquors.

We have seen many instances where sudden death has occurred from the causes above stated. In other instances we have known some to swallow, at one draught, a pint or more of brandy, in a raw state, which produced but little effect upon the nervous system. This, in some

\* Atrophy—A disease consequent to the want of ability to assimilate food.

measure, has been owing to a peculiarity of constitution; but more frequently, to long habits of dissipation.

In persons who have a broad chest, large head, short neck, and who are of a full gross habit of body, habitual intemperance frequently induces apoplexy, without much previous diminution of muscular strength; whilst those of a slender and spare form often waste away gradually, and almost imperceptibly, by a species of atrophy which saps the strength of body and mind: this is, in a great measure, owing to the excessive and unnatural labours which the digestive organs are called upon to perform.

Hard drinking is no doubt one of the causes to which we must impute the increase of consumptions.

The habit of drinking proceeds frequently from misfortunes in life. The miserable fly to it for relief. It affords them indeed a temporary ease. But, alas! this solace is short-lived; and when it is over, the spirits sink as much below their healthy tone as they had before been raised above it. Hence, a repetition of the doses becomes necessary, and every dram prepares the way for another, till the unhappy wretch becomes a slave to the bottle, and at length falls a sacrifice to what at first perhaps was taken only as a medicine. No man is so dejected as the drunkard when his debauch is gone off. Hence it is, that those who have the greatest flow of spirits while the glass circulates freely, are of all others the most melancholy when sober, and often put an end to their own miserable existence in a fit of spleen or despair.

The practice of taking drams in the morning, is a very common prelude to intemperance.

Drunkenness not only proves destructive to health, but likewise to the faculties of the mind. By habits of intemperance, the greatest genius is often reduced to a state of idiocy.

Intoxication is peculiarly hurtful to young persons.—It heats the blood, impairs the strength, and obstructs the growth; besides, the frequent use of strong liquors in the early part of life, prevents any benefit that might arise from them afterwards. Those who make a practice of drinking spirituous liquors when young, cannot expect to reap any benefit from them as cordial medicines in the decline of life.

Drunkenness is not only in itself a shameful vice, but is an inducement to many others. There is hardly any base act that the drunkard will not perpetrate for the love of liquor.

A person addicted to habitual intemperance, may, if the constitution be not essentially impaired, by an effort of mind, break off abruptly from the use of ardent spirits.

We recollect having read an anecdote, deemed authentic, which is interesting on this subject, and although the words are not remembered, will endeavour to offer its substance. A settler in the back country, as the western part of Pennsylvania was then called, a farmer, was industrious in clearing his land, and took all possible care of his family, but as the labour which he had to encounter, was severe, he thought that a dram of bitters in the morning would add to his strength; he continued taking spirits for some time, and soon found that he required some in the middle of the day. Perceiving a growing propensity, he became aware of his situation, and one morning on rising to go to work, finding that his first impulse was towards the bottle, he was struck with a sudden resolution: instead of taking his accustomed dram, he dashed the bottle against a stump before the door: his wife was surprised at his conduct, but he observed in a decisive tone, that *he never would become a slave to the bottle*. From that time he never tasted a drop of spirits: he lived to a good old age, and died lamented by a numerous family, which he left in comfortable circumstances.

Even those who have long been in the habit of using, intemperately, intoxicating liquors, and whose constitutions have become much undermined, may discontinue the deplorable practice by taking, instead of ardent spirits, wine, by using assafoetida, and other stimulants which are not narcotic, abating gradually the quantity, as it may be found safe, for sudden and important changes are always dangerous,

Certain fevers are not unfrequently attended with a delirium, which in their early stages, may be mistaken for intoxication. Indeed phrenzy, from whatever cause,



and blows on the head, often produce effects similar to drunkenness, and those who had drank little if any spirits, have frequently suffered from neglect or ill treatment, their real condition being misunderstood.

## OF NURSING THE SICK.

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We have thought it advisable to offer in this place a few general observations on the subject of nursing the sick.

Besides administering proper medicines, there are numberless other attentions which are of great importance in assisting to effect a restoration of health. Medicines should be given at a proper time, and in a proper manner, and the system should be supported, if necessary, while under their operation. It is also necessary to be cautious in the administration of drinks and food; to keep the air in the room of a proper temperature; to keep the patient quiet as possible; to demonstrate mildness and kindness, and to watch carefully every alteration in the disease.

By attending the sick, and carefully noticing the various occurrences in diseases, a great degree of accuracy may be acquired, both in distinguishing their symptoms, and in the application of medicines; neither can any theoretical knowledge supply the place of observation and experience in these matters. Indeed, by a close and impartial attention, and by reflecting on passing symptoms and appearances, the intelligent attendant can become of inestimable value to the sick person.

As "the issues of life and death" are often in the hands of a nurse, the office is surely important, and one of the highest responsibility.

Most nurses, however, like too many others of the human race, are rather disposed to exercise their own judgment, than to listen to such instruction as would, perhaps, induce them to forsake practices which they have been taught to believe correct, or to which they adhere merely because they are accustomed to walk in the tracks of their predecessors. Now, much as we venerate the me-

ories of our medical ancestors, and much as we respect even the incorrect well meant intentions of faithful nurses, yet we are not among those who believe that "an old error is better than a modern truth."

But we have not any new fangled notions of our own to advance, or any opinion that does not walk hand in hand with the present improved state of medical science.

It may be received almost as a general rule that at the commencement of inflammatory diseases, fevers, &c., and when it becomes necessary to take medicine, large doses of inert substances, teas, and the like, are useless and injurious, these are commonly recommended and administered by one or more nurses. Although it may be proper in many cases to try at first a sweat, this can be effected, as will be pointed out in a proper place, more easily, and to far greater advantage, than by deluging the stomach with articles which will have a tendency to destroy its tone: and further, it is very impolitic, when a person is really sick, to suffer the disease, by using inefficient means, to make a stronger head against the efforts of art. The only way to spare the expense of much medicine, to avoid the disagreeable necessity of taking it, and also most likely long sickness, perhaps death, is to use active means immediately: \* one efficient dose of medicine, taken properly and in time, will do more good than repeated doses at a later period. Many people think that they must be continually giving a sick person something like medicine; this, especially in the early stages of disease, is by no means necessary. †

Very frequently too much is done by nurses for the sick; although in some cases, especially in typhus or nervous fever, when the patient is sinking into stupor and insensibility, it is necessary to give repeated stimulants

\* The necessity of being particularly explicit, it is perceived, draws us into repetitions in different parts of the work; this cannot be avoided.

† If any suppose that some of the above observations are not directly relevant to nursing, it may suffice, in explanation, to remark, that in many parts of this country, especially in places remote from towns, where the practice of detached settlements does not authorize the full attendance of physicians, those deemed experienced nurses, have great control over the management of the sick in every respect.

or tonics: but most frequently after the operation of powerful medicines, nature requires rest and sleep; this, if it can be obtained, is the best cordial.

A sick person may feel tolerably comfortable and strong whilst lying in bed, but will often faint or have to sustain an additional attack of fever if lifted up and placed in a chair, in order that the bed may be made, or for any other purpose. Very sick and weak persons, when taken out of bed, should never be raised in a perpendicular, but moved in a horizontal posture. In yellow fever, and other diseases, many have died instantly on being raised up in bed.

Whenever a patient is much debilitated, a bed pan should, if possible, be obtained, it can at least very seldom be difficult to provide a substitute.

Loquacity in a nurse is a great evil, indeed it is sufficient to counterbalance every other qualification; such conversation as is necessary to cheer the sick person, is advisable; but all other talk serves to distract the patient's mind: whispering is still worse than loud talking, especially if the patient be in a dejected state, or inclined to delirium, suspicions of danger will mostly, by listening to whispers, be excited and kept afloat in the weakened or wavering intellect. The encouraging countenance of a friend who sits silent by the bed side, is often very consolatory to a sick person, and will mostly do more good than many words, which, owing to the altered or enfeebled state of the patient's perceptions, are not uncommonly misapplied; besides, listening to conversation, by exciting the mind, creates a disposition to, or increases fever.

There are some friends and attendants, who on entering a sick person's chamber, betray too much their fears and apprehensions by their looks; this, perhaps, cannot always be avoided by near relatives, we censure not the expressing that appearance of anxiety which demonstrates a deep interest in the condition of the sufferer: but there are others, who seem to think that a dismal face is requisite in a sick room; such are looked upon by the patient as harbingers of dissolution.



If on any occasion it becomes necessary to warn a sick person of approaching death, it ought to be done by a proper individual, who can command his own feelings, and sustain the fortitude of the person whom he addresses.

The nurse should attend to keeping the air in a sick person's chamber of a comfortable and even temperature. The patient's head should never be placed near a fire, and the feet ought always to be kept warm. Much injury is frequently done by incautiously washing the floors at an improper time, especially when the patient has been taking medicines calculated to relax the surface of the body.

Very considerable judgement can be exercised in getting a sick person to take nourishment when it is thought necessary: some tease the patient by enquiring what would be preferred, and others present messes of food sufficient for a healthy person. Frequently the victuals are cooked in the patient's sight, with much bustle or formal preparation; this is no doubt well meant, but not likely to effect the desired purpose. If the patient's appetite be very weak, it is advisable rather to throw out a hint of something suitable and palatable, to which a partiality had been evinced in early life, without enquiring whether it is wanted, and after administering some innocent cordial, to endeavor again cautiously to tempt the appetite: or there is another plan which we have frequently seen pursued with success. Let the nurse, without consulting the patient, prepare in another apartment, a very small portion of some palatable nourishment, and then offer it unexpectedly. If the functions of digestion are once resumed, the stomach can be gradually led on, until it is able to receive proper food, which should be given in small quantities, and frequently. Neither should the patient be suffered to eat too much, even when considerably advanced in recovery.

When a plan of medical treatment for a sick person is resolved upon, let it not be rendered inefficient by false kindness. Let not the nurse and the patient agree together that *a little less medicine will do*, that *a smaller dose will answer*. Although we recommend that all possible kindness be shown to the sick, and that they

be allowed every indulgence that will not injure them—yet firmness is an essential requisite in a nurse—for instance—in many conditions of disease, and in many more than has been generally supposed, water may be drank with impunity ; but sometimes water will not quench thirst, and the patient would drink a gallon in an hour if permitted. Here the nurse is called upon to prevent injurious consequences: the stomach ought not in any case be permitted to become overloaded.

When a physician is called to see a patient, his directions should be scrupulously observed, for it is impossible that two contrary modes of practice can agree together, and waving the consideration of the patient's interest, it is but common justice, that he upon whom the responsibility rests, should have a fair opportunity to exert his skill, and this can never be done without the nurse's faithful co-operation.

## OF THE KNOWLEDGE AND CURE OF DISEASES.

BEFORE entering into the examination of particular diseases, some remarks under this head will be appropriate.

Every disease may be considered as an assemblage of symptoms, and must be distinguished by those which are most obvious and permanent. Instead, therefore, of giving a classical arrangement of diseases, according to the systematic method, it will be more suitable, in a performance of this kind, to afford an accurate description of each particular disease as it occurs; and, where any of the symptoms of one disease have a near resemblance, to those of another, to take notice of that circumstance, and, at the same time, to point out the peculiar or characteristic symptoms by which it may be distinguished. By a due attention to these, the investigation of diseases will be found to be a less difficult matter than most people would at first be ready to imagine.

A proper attention to the patient's age, sex, temper of mind, constitution, and manner of life, will likewise greatly assist, both in the investigation and treatment of diseases.

In childhood the fibres are lax and soft, and the nerves extremely irritable; in old age the fibres are rigid, the nerves become almost insensible, and many of the vessels impervious. These and other peculiarities, render the diseases of the young and aged very different, and of course they must require a different method of treatment.

Females are liable to many diseases which do not afflict the other sex; besides the nervous system being more irritable in them than in men, their diseases require to be treated with greater caution. They are often less

able to bear large evacuations; and all stimulating medicines ought to be administered to them with a cautious hand.

Particular constitutions not only dispose persons to peculiar diseases, but likewise render it necessary to treat these diseases in a peculiar manner. A delicate person, for example, with weak nerves, who lives mostly within doors, must not be treated, under any disease, precisely in the same manner as one who is hardy and robust, and who is much exposed to the open air.

The temper of mind ought to be carefully consulted in sickness. Fear, anxiety, and a fretful disposition occasion and aggravate diseases. In vain do we apply merely articles from the drug-store, to remove maladies which are seated in the mind. When this is affected, the best medicine is to soothe the passions, to divert from anxious thought, and to keep the patient as easy and cheerful as possible.

Attention ought likewise to be paid to the climate, or place where the patient lives, the air he breathes, his diet, &c. Such as live in low marshy situations, are subject to many diseases which are unknown to the inhabitants of higher countries: and persons who feed grossly, and indulge in strong liquors, are liable to diseases which do not affect the temperate and abstemious.

It has already been observed, that different occupations and situations in life, dispose men to peculiar diseases. It is therefore necessary to inquire into the patient's occupation and habits. This will not only assist us in finding out the disease, but will likewise direct us in the treatment of it.

It will be proper to ascertain, whether the disease be constitutional or accidental; whether it be of long or short duration; whether it proceeds from any great or sudden alteration in diet, or mode of living. The state of the patient's body, and of the evacuations ought also to be inquired into; and likewise whether he can with ease perform all the vital and animal functions.

It will likewise be proper to inquire, what diseases the patient has formerly been liable to, and what medicines were most beneficial to him.



Every disease weakens the digestive powers. The diet ought therefore, in all diseases, to be light and of easy digestion. It would be as prudent for a person with a broken leg to attempt to walk, as one in a fever to eat the same kind of food, and in the same quantity, as when he was in perfect health. Even abstinence itself will sometimes cure a fever, especially when it has been occasioned by excess in eating or drinking.

Nor is a proper attention to diet of less importance in chronic than in acute diseases. Persons afflicted with low spirits, wind, weak nerves, and other hypochondriacal affections, generally find more benefit from the use of solid food and generous liquors, with exercise, than from all the medicines which can be administered to them.

The scurvy, that most obstinate malady, will sooner yield to a proper vegetable diet, than to all the boasted anti-scorbutic medicines of the shops.

In consumptions, when the stomach is so much weakened as to be unable to digest the solid fibres of animals, or even to assimilate the juices of vegetables, a diet consisting chiefly of milk will not only support the patient, but will often relieve the disease when every other medicine has failed.

Indeed, the success of practical medicine, in many cases, depends, in a great measure, on our being acquainted with the patient's habits during health; and it is also absolutely essential that the person from whom relief is expected, should be acquainted with the nature and seat of the complaint: the requisite information may generally be obtained by judicious queries.

A particular attention to existing symptoms is of course necessary. The state of the stomach, of the tongue, and of the skin—the colour and consistence of the stools—the appearance and quantity of the urine—the aspect of the countenance—and above all, the state of the pulse, are to be attentively considered.

Many people are subject to the piles, and this complaint often requires a modification of treatment in supervening diseases.

In the diseases of children at certain ages, it is proper to ascertain, by examining the gums, how far, or whether they depend on the process of teething. When a child's belly is large, and it frequently picks its nose and grinds its teeth while asleep, when its breath is offensive and its appetite variable, there is reason to suspect worms.

In the diseases of females, it is necessary to know whether the periods of menstruation are regular: for no female, who has arrived at the age of puberty, and with whom the menses have not ceased by the natural course of age, can enjoy health, except during pregnancy, when this discharge is suppressed or irregular.—It is also very important to inquire whether a woman, when sick, is in the state of pregnancy.

Very many diseases of females are more or less connected with, or dependant on, some deviation from regularity in those habitudes which are peculiar to the sex.

OF THE PULSE.

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MUCH information may be obtained, in relation to diseases by examining the pulse: (by the term pulse we mean the beating of the arteries;) in cases of sickness it is generally calculated to feel it at the wrist.

Sometimes, as arterial action appears not always equal, the arteries passing over the temples afford stronger pulsations than those of the wrists, and sometimes the pulsations are stronger in one arm than in the other. Even this test of a patient's condition, is to be admitted with caution. Many temporary causes may increase or diminish the action and force of the pulse, so as to deceive even experienced and skilful observers. Intemperance or anger frequently quicken and raise the pulse, whilst fear and grief diminish its frequency, volume, and power.

The pulse, in healthy grown persons, beats at the rate of from sixty-five to seventy-five in a minute: that of children is much more frequent, but in aged persons it beats slower than it did during the prime of life. It is difficult to lay down rules by which to judge from the pulse, neither can any axioms stand in the place of experience and well directed observation. Our remarks therefore, will be general, and we present them, liable to qualification by other observations on diseases which will be found in the progress of the work.

“It is always best to sit awhile before the state of the artery is examined; and it should always be felt twice before leaving the house. The patient should not speak while the pulse is under examination, as talking is very liable to produce variation.”

“Two fingers are better to feel the pulse than either less or more.”

There are two different and distinct kinds of pulsations: the one will resist considerable compression by the fingers, and the other will not. The first may be called the hard and the other the soft pulse.

The pulse is sometimes hard, and will strongly resist compression, when its volume is small. This pulse will generally increase in volume by the abstraction of blood, the sanguiferous system being overloaded and unable to perform its functions.

When the pulse is full and hard, the propriety of blood-letting is strongly indicated, especially if the skin be hot and dry.

A quick pulse, which is evidenced by great rapidity of action, does not always indicate the necessity of bleeding: and many lives have been lost by bleeding when the pulse, although full and frequent, was soft. Such a pulse we have several times noticed at the commencement of the disease commonly called the cold plague.—It is not uncommon in several forms of fever, which will by no means admit of the use of the lancet.

A quick pulse generally indicates great irritation of the brain and nervous system.—A small frequent pulse, with a cool skin, indicates weakness.

Sometimes the pulse intermits or beats at irregular intervals; this implies a correspondent intermission in the action of the heart, and may be owing to nervous debility, to extreme exhaustion of the whole system, to organic disease of the heart itself, or to water infused in the membrane which covers the heart. Those who are unaccustomed to judge from the pulse, should be deliberate in their examinations. Much advantage may be gained by their comparing the patient's pulse with that of a healthy person, and it will be well to remember that, nevertheless, although much information can be gained from this source, yet other circumstances and considerations ought also to be taken into view when forming an opinion in regard to medical treatment.



## OF FEVERS.

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FEVERS are the most common of diseases, and the most complicated.

The general symptoms of fever are increased heat, frequency of pulse, pain in the head, back, or loins, thirst, disturbed sleep, or wakefulness, sickness of the stomach, an excited state of the mind, or delirium, a furred tongue, and an unusual appearance of the eyes.

Fevers are considered either primary or symptomatic; that is, original complaints, or depending on local affections. Primary fevers may be divided into two orders, the INFLAMMATORY and the NERVOUS; although, especially of late years, we find those of the first order frequently terminating in the latter, and the symptoms of both often blended, so as to require great caution in medical practice.

Inflammatory fevers exhibit a very increased action of the heart and arteries, a hard and full, or hard and chorded pulse, often a florid colour of the face, the blood when drawn, is redder and thicker than in health, and the urine is mostly high coloured.

In nervous fevers, the brain and the whole nervous system appear more immediately the seat of disease: the energy of them is impaired, the patient sinks speedily into a stupid or delirious state, the strength of the pulse is diminished, although at times it is full, its action is mostly frequent and often interrupted, the blood is thin, and in an apparently dissolved state.

Fevers are further divided into continual, remittent, and intermittent. By a continual fever, is meant that which never leaves the patient during the whole course of the disease, or which shews no remarkable increase or abatement in the symptoms. A remitting fever differs

from a continual, only in a degree: it frequently increases or decreases, but never wholly leaves the patient during its course, while intermitting fevers or agues have evident intervals or remissions.

It is not intended to inquire here critically into the nature of fevers: this would lead to unprofitable speculation. But having offered these preliminaries, it will be the main object, as individuals of the class are severally noticed, to point out their causes, symptoms, and modes of cure.

“A fever is a disease which no knowledge of the structure of the human body, as far as it is at present known; no knowledge of the properties of fluids, as far as they have hitherto been investigated; no knowledge of the action of the moving parts, as far as they have hitherto been observed; could give the smallest ground to suppose ever existed. In showing its history, therefore, observation of the disease is to be entirely adhered to, without any reasoning why, or how, any thing in it takes place; or without any theory, as it has been called. It would be just as fruitless, at least for any useful purpose, as if a geographer were not to describe a country, but reason why a hill should be placed in one region, a valley in the other; why one shore is rocky, another sandy; instead of actually giving the situation of the hills and valleys, the rockiness or sandiness of the shores.”—FORDYCE.

## INFLAMMATORY OR ACUTE CONTINUAL FEVER.

This fever is more frequently met with in the northern portion of the United States; it is not uncommon in the state of Ohio and in the western portion of Pennsylvania: cases occur at all seasons of the year, but oftener in the spring. It usually attacks the young, and frequently those in the vigour of life and health.

**CAUSES.**—A redundance of blood, violent exercise, eating or drinking to excess, an obstructed perspiration, violent passions, the suppression of accustomed evacuations, lying on the damp ground, and the like.

**SYMPTOMS.**—Frequently first a slight chill, not sufficient to cause shaking, dizziness, excessive thirst, redness of the face and eyes, the skin hot and dry, pain in the head, and sometimes in the back, often costiveness, a frequent, full, and strong pulse, the tongue coated with a white fur, aversion to the light, great restlessness, vomiting, delirium, jerking of the tendons, cold sweats, &c.—These and other collateral symptoms will be exhibited in the course of the disease, if timely relief is not obtained; but when properly treated, it is less dangerous than other fevers, which make their onset in a more insidious manner.

**CURE.**—In this fever, bleeding is strikingly indicated and of essential importance: the quantity of blood to be taken will depend upon the strength and age of the patient: an athletic man may lose a quart of blood with perfect safety, and frequently the pulse will be fuller afterwards than before. Fifteen grains of calomel should be then given, and in four hours thirty grains of jalap, or an ounce and a half of Epsom salts: if the pulse continues full and hard, the patient should be again bled, and the operator will do wisely in graduating the amount of blood taken, by the state of the pulse in the other arm. As soon as the pulse begins to abate its violence of action, the arm is to be tied up, since it is better to bleed again, which may be done in six hours or less, if necessary, than to risk the danger of prostrating the patient, and thus to lay the ground-work of a typhus state of fever.

It is absolutely necessary, however, that the force of the pulse be broken by bleeding, for the oppression effected by excess of arterial action, will either cause the patient's death by inflammation and mortification, or plunge him into the typhus state, with equal certainty as would too great a loss of blood by venesection.

If in ten hours after the administration of the calomel, the fever is still considerable, and the patient has not been effectually purged, half an ounce of salts should be dissolved in an infusion of four drams of senna, and given, one half immediately, the other half in an hour, if the first does not operate.

It is necessary that the bowels be well evacuated; as soon as this is effected, and the pulse has become somewhat reduced, fifteen grains of James's powder should be given every three hours; if this sicken the stomach, the intervals between the doses may be extended. Bladders filled with warm water, should also be placed at the feet and sides. When the skin becomes moist, and the patient perspires freely, the doses may be lessened, and the intervals between them may be still more extended. Under the operation of the above named medicines, the patient may be permitted to drink moderately, and a little at a time, of any mild teas, such as balm, sage, or mint.

If in the course of forty-eight hours after the commencement of this mode of treatment, pain, and a sense of fulness in the head, with, or without delirium occurs, a large blister ought to be applied to the back of the neck; and the forehead, temples, and the whole scalp, it being shaved, should be moistened frequently by cloths dipped in cold water, or vinegar, or with vitriolic æther; this last is best used by being poured into the hollow of the attendant's hand. If the patient complain of considerable pain in the side or breast, it will be necessary to place a large blister over the part, and to bleed again, if the pulse will admit it.

During the whole course of the disease after the first evacuations, it is advisable that the patient have two or three stools a day. A bleeding at the nose is not uncommon, and is a favorable symptom: if after several days, the pulse becomes softer, the tongue more moist, and the urine begins to let fall a sediment, there is reason to expect a favorable issue of the disease, in consequence of following the mode of treatment already directed: but if instead of these appearances, the spirits grow languid, the pulse sinks with stupor, the breathing becomes difficult, accompanied with trembling of the nerves, and starting of the tendons, there is reason to fear the consequences, to look further and to examine the mode of treatment directed for nervous or typhus fever.

The pure acute continued fever is often accompanied with local inflammation. We, however, coinciding with Dr. Fordyce in opinion, have calculated to treat on fevers as diseases of the system generally: and propose to treat



of morbid affections principally local, under distinct heads.

It is not only necessary to be careful with regard to the administration of suitable nourishment during the continuance of this fever, but also after the patient becomes convalescent; although the body is weak after a fever, still the diet should be rather light than too rich; but, nevertheless, sufficiently nourishing. Too much food or drink taken at one time, or too much exercise or company, ought to be carefully avoided; it is advisable that the mind be kept in as comfortable a state as possible. Persons frequently receive injury by intense application to study or business before they have effectually recovered from sickness.

We do not recommend the use of Peruvian bark so strenuously as has been generally done by medical writers in former days; for there are strong doubts of the virtues which have been ascribed to it as a specific. We believe that the gentian and quassia, even also the dogwood bark are purer bitters, and operate as tonics with equal effect, if properly administered when tonics are required.

Particular caution is necessary when the system has been reduced by sickness, that the tonics or stimulants administered be not used rashly. It is very advisable, however, especially in a southern climate, or sickly season, to observe that the system should not be suffered to sink too much under the operation of depleting medicines. Many of those who are attacked by the bilious and inflammatory fevers of the western country, lose their lives by want of attention or ignorance in relation to this important part of medical treatment.

## OF INFLAMMATORY BILIOUS FEVER.

Under this head we rank a form of disease that is common in this country, and especially in the more southern parts. It has been intimated in previous pages, that morbid affections of the biliary secretions are frequent; it has also been intimated, that even the agues of the climate depend much upon some mode of unhealthy action in the liver.

The liver is not always alone affected in cases of fever, but frequently also other glands contained within the cavity of the abdomen or belly.

With regard to the distant causes of diseases, we have professed in many respects our ignorance; nor has the confidence expressed by others, afforded us much satisfaction. It appears evident, that many fevers in the western country are marked peculiarly by a particularly diseased state of the liver, or of its secretions; therefore, however we may be enabled to perceive effects only, and not causes, yet in bilious fevers we should closely direct our attention to that organ which secretes bile. So far as experience has afforded information, physicians have generally agreed that there is no medicine which can so effectually alter its mode of action as mercury, when properly administered. The submuriate of mercury, or calomel, has been esteemed the best preparation for common use; and indeed it is generally preferred by experienced and judicious practitioners of medicine.

When its use has been followed by medicines suitable to remove it from the bowels, there is no danger in its being administered. It has already been remarked, that medicines which cannot do harm, seldom, if ever, do good.

The first symptoms which indicate a high grade of bilious fever, as mentioned in the introduction, are most frequently and determinately evidenced by a pain on raising up the eyes. A high color of the urine and a dark or bluish appearance of the stools, have generally been considered by medical writers as important and decisive symptoms; but very often, both the urine and the stools are of a light color when this disease commences, and not uncommonly through its progress; unless proper medicines are administered.

In severe attacks of bilious fever, the nature of the disease may be known not only by the symptom particularly mentioned, but by others of a more equivocal character, by the discharges from the bowels, and from the bladder, and by the puking up of bile; the tongue is often coated with a dark coloured fur, the skin is hot and dry, and occasionally violent delirium occurs in a few hours after the first attack.

This delirium is essentially different from the state of coma or stupor, which is present in typhus fevers, and appears consequent to a very high degree of arterial action; nevertheless, it is requisite that bleeding should be resorted to with caution, particularly during the autumnal months and in sickly situations.

**MODE OF TREATMENT.**—In the treatment of this disease, most physicians, and especially those educated in northern and healthy climates, have generally used emetics at first. We object not to the principle on which they are administered, but have found, especially in the southern section of the United States, that their use is often dangerous.

We often find a very morbid irritability of the stomach, and it is always important that this be checked: present relief may be apparently obtained by a discharge of bile from this organ by the mouth, but if the disease is taken in time, and it be possible for the patient to retain a purge long enough for it to operate, greater safety is insured than by the use of emetics: twenty grains of calomel, mixed in a little syrup, ought to be administered as soon as possible; this is not easily puked up: if the patient's constitution be strong, four grains of gamboge may be added. It is often necessary to repeat the dose of calomel in two or three days.

It is a maxim which may be observed in most diseases, that it is necessary to excite a counter-action greater than the action which exists to the detriment of health.

The purge we have recommended, will often excite an operation of the bowels within five or six hours after it has been taken: this will commonly check the puking; then, or as soon as the patient begins to feel it about to operate, an ounce and a half of salts should be administered. If a disposition to puking is very obstinate, a large blister moistened with spirits of turpentine, or a strong mustard plaster, (prepared as will be directed in that part of this work which treats of medicines,) should be applied immediately over the stomach, notwithstanding the skin may be hot and dry. It is not advisable to keep either of these applications on the surface, after the puking has ceased.

Sometimes the highest grade of bilious fever attacks so violently as to leave very little opportunity for benefit to be afforded by the aid of medicine, as it terminates its progress by destroying the patient in less than forty-eight hours. In these desperate cases, which may be known by their extreme violence in the onset, we have saved lives by a mode of practice unjustifiable except in the greatest emergencies.

Reasoning from the evident principle already assumed, that it is necessary to excite a counteraction to disease, we have in violent cases of bilious fever, where no time was to be lost, administered one hundred grains of calomel, combined with eight grains of opium, in pills of four grains each, in the course of sixteen hours; applying at the same time a very large blister, moistened with spirits of turpentine, over the region of the liver and stomach, and supporting the tone of the stomach by a little good porter taken frequently and in small quantities, although every symptom present appeared to argue the necessity of depletion.

The operation of the calomel, the use of which was intended to excite salivation, was facilitated by the blister, and in twenty-four hours the gums became sore. The effect desired being thus established, we were able to attend then to the proper evacuation of the bowels.

But even the severest bilious fevers of this country seldom demand so harsh a mode of treatment. Much, we confidently assert, in these diseases depends on having the stomach and bowels well evacuated downwards.—This may, it is true, be sometimes done by emetics, but it is only when they produce a cathartic effect

Very little can be gained by temporising medicines in those severe and active diseases to which persons resident in this country are often liable.

When the morbid tone of the system is measurably reduced, sweet spirits of nitre and antimonial wine—two tea spoonsful of the former and twenty drops of the latter, should be taken every three hours. The bowels ought to be kept open, but caution should be used to prevent a dysentery which often follows bilious fevers in this climate. This can generally be done by the use



of an infusion of quassia, a handful of the wood, finely chipped, being put in a tea pot and subjected for twenty minutes to the action of a pint of boiling water; a wine glass full of this should be taken every three hours, or else the same portion of a decoction of the dogwood and wild cherry-tree bark. If the patient's previous habits require it, there may be an addition of a tea spoonful or a table spoonful of brandy to each dose.

Neither these, however, nor any other tonics or stimulants should be administered, unless the debility of the patient requires it.

In all fevers, if the system becomes much debilitated, and if after proper evacuations, the tonics recommended do not answer the desired purpose, the use of blisters is indicated. These are generally made too small, and a small blister will be found nearly, if not quite, as painful as a large one; blisters, unless there is some particular reason to the contrary, ought to be applied over fleshy parts.

Much, in the administration of medicine, must necessarily depend upon the judgment and discretion of the person who has charge of the sick.

In all fevers, a proper attention should be paid to the patient's longings. These are sometimes the calls of nature, and point out what may be of real use. Patients are not, indeed, to be indulged in every thing that the sickly appetite may crave; but, it is generally right to let them have a little of what they eagerly desire, though it may not seem altogether proper. What the patient longs for, his stomach will generally digest; and, such things have sometimes a very happy effect. We should, however, be careful to distinguish between a rational longing for any thing, and the incoherent wishes of a person in delirium.

When a patient is recovering from a fever, great care is necessary to prevent a relapse. Many persons, by too soon imagining themselves well, have lost their lives, or contracted other diseases of an obstinate nature. As the body, after a fever, is weak and delicate, it is necessary to guard against catching cold. Moderate exercise in the open air will be of use; bodily fatigue is, by all means, to be avoided.

## OF INTERMITTENT FEVER, OR AGUE.

This disease consists of attacks or paroxysms, in which there are three stages, the cold, the hot, and the sweating stage. These are succeeded after a time by a perfect intermission of febrile symptoms. It has been divided by medical writers into the quotidian, the tertian, and quartan.

In the first form of the disease, the attack takes place daily, and there is an interval or freedom from fever of twenty-four hours. In the second form of the disease, the paroxysm comes on every other day, leaving an interval of forty-eight hours; and in the third, there is an interval of seventy-two hours. Frequently, however, in the course of this disease, the intermission becomes varied.

Of the causes, we have already in part written; some additional ones may, however, be stated.

One of the principal causes of ague is poor living and exposure to night air in uncomfortable houses. Much, however depends upon certain conditions of the atmosphere, though it is a truth, that in country places especially, the poorer and more indolent class of society are most liable to this disease.

In parts of Ohio, Illinois, and Missouri, and indeed throughout the whole of the western country, many individuals, and often entire families, linger under this disease during several months of the year, from false economy and erroneous opinions in relation to the simplest truths of medical art.

We have seen families almost exterminated in consequence of living on coarse corn bread without salt, and on buttermilk, with the occasional use of whiskey, when they were well able to afford better nourishment.

Another cause of the complaint, in addition to those mentioned in page 19, is the unnecessarily continuing to wear wet clothes, when they might easily be changed.

When the inhabitants of a high and healthy country, remove to a low one, they are frequently seized with intermitting fevers or agues.

**SYMPTOMS.**—Intermitting fevers, or agues, are always ushered in by a chill and a trembling or shaking of the whole body, which sometimes causes convulsions. The chill lasts generally about five or six hours, and is then succeeded by a fever. During the presence of the chill the countenance is pale and the skin cool.

It will be well here to notice, that scarcely any two cases of the same disease, present exactly the same symptoms. Sometimes the ague comes on suddenly, when the person attacked thinks himself in perfect health; at other times it is preceded by weakness of the limbs, stretching, yawning, or pain in the head or loins. During the period of the chill, there is often pain in the head and back, accompanied with a distressing sickness at the stomach, and vomiting. When fever gradually comes on after the chill has passed away, the patient's sensations are comfortable; these agreeable feelings, however, do not continue any length of time. Excessive thirst is soon experienced, with great restlessness, and sometimes delirium; the urine is mostly high coloured, the pulse is full, quick, and hard, and the tongue becomes covered with a whitish fur at this period of the disease. When the paroxysm of fever subsides, the skin becomes moist, a profuse sweat breaks out, and the patient is left in a very debilitated condition. When the attacks are of short duration, when they return at regular periods, and leave the intervals perfectly free, the disease is not attended with sudden danger. When the paroxysms are of long continuance and accompanied with delirium, very frequently immediate danger is to be apprehended.

**MODE OF TREATMENT.**—It is a practice but too common among those unacquainted with the nature of the constitution, to use stimulants on the first accession of an ague: this may afford temporary relief, but will certainly effect eventual injury. Many take a large dose of whiskey and red pepper, or hot brandy toddy.

The first thing that should be done in this disease, is to obtain proper evacuations from the stomach and bowels: this will render the application of stimulants or tonics safe when it becomes proper to use them. Bleeding may sometimes be useful at the beginning of this fever, when

excessive heat or delirium gives reason to suspect local inflammation, but this is scarcely ever necessary, and often tends to prolong the disease.

At the commencement of this complaint, the liver is mostly affected, and a large quantity of bile is often contained in the intestinal canal: to use stimulants therefore, in this condition of the system, is, metaphorically speaking, but adding fuel to flame.

Unless some peculiarity of constitution prevents, it is advisable to use, in the first place, an emetic at the commencement of the chill; this will probably also act as a cathartic. Eight grains of tartar emetic should be dissolved in a half pint of warm water, two table spoonsful of which ought to be taken immediately, and one every fifteen minutes afterwards, until an effectual operation is produced. If the whole of this, taken according to directions, should not operate, four grains more of the same article should be dissolved in the same quantity of water, and used in like manner. When the puking has commenced, luke-warm water should be drank freely: this will much facilitate and render less painful the operation of the medicine. After the puking has ceased, a pint of nourishing gruel, having added to it two or three table spoonsful of good brandy or whiskey, if it be found necessary, ought to be taken, in small quantities at a time, as the stomach is able to bear it. If, after the operation of this medicine and the use of the gruel, the patient appears not too much debilitated, a purge should be administered. If the patient is much debilitated, this may be delayed for some hours: during this time a light but nourishing diet ought to be cautiously given. As soon as the patient appears able to bear it, the purge should be taken. This had better be composed of fifteen grains of calomel and twenty five grains of jalap. If it does not operate in six hours, an ounce of epsom salts, dissolved in a gill of water, ought to be taken.

These are the cathartics which we would recommend, and they may be taken, if it be necessary to use both, by adults, (except females in a state of pregnancy,) with perfect safety: the condition of pregnant women will,



however, be considered in a proper place, to which the reader is referred.

Having no doubt from experience, and from the testimony of the best medical writers, of the superior efficacy of calomel as a purge in fevers, and some other diseases, we would recommend attention to an article which will be found on the subject of this medicine in the latter part of this work.

Those, however, who object to the use of calomel, may derive benefit from an infusion of senna: four drams or a handful of the leaves should be subjected to the action of two-thirds of a pint of boiling water for twenty minutes—the vessel in which the operation is performed ought to be kept covered—it should then be strained and well sweetened with molasses or sugar, and drank when sufficiently cool.

After the bowels have been well evacuated, in the intervals between the hot stages, tonics, and often stimulants, are necessary.

Some medicines, no doubt, produce specific effects: for instance, we may remark the peculiar influence of calomel and other preparations of mercury on the liver, and indeed the whole glandular system; but how far the specific influence of certain medicines extends, is not yet known.

The Peruvian bark, although we have expressed doubts with regard to the extent of its specific virtues, is certainly a powerful and permanent tonic, and is very useful in restoring strength and vigor to morbidly weakened habits: it is however often difficult to obtain this article of a good quality.

A table spoonful of Peruvian bark may be administered every two hours during the interval of fever; it is best to mix each dose in a wine glass full of milk, or a lesser quantity of wine: if it excites nausea or vomiting, as much powdered cloves as will lie on the point of a pen-knife, should be added to each dose. If it creates costiveness, five grains of rhubarb may be added in like manner; and if it purges the patient, from five to ten drops of laudanum should be added. The doses ought to be taken immediately after being mixed.

Another article, which has of late received great attention, particularly by physicians of the eastern states, is the sulphate of quinine: this is essentially the medicinal principle of the Peruvian bark, in its most concentrated form. The dose of this is one grain, to be taken, (dissolved in a little mint water, or in the form of a pill,) every hour during the intermission of the paroxysms of fever. Each grain of this article possesses the essential virtues of a dram of the Peruvian bark.

Another mode of treatment we have found very remarkably efficacious: this is, to administer a wine glass full of a very strong infusion of quassia wood, (this wood should be finely clipped before it is subjected to the action of the boiling water,) and five drops of Fowler's solution of arsenic in combination, every three hours during the intervals between the paroxysms of fever; it is advisable to use not more than twenty-four drops of the arsenical solution in one day: a half wine glass full of the infusion of quassia, may be used at an intermediate interval between each dose.

There are many other tonics, such as the gentian colombo, &c. useful in this disease, and in obstinate cases it is often found advisable to change from the use of one to that of another.

Stimulants are often necessary, and Dr. Buchan remarks that "where the patient must be supported by cordials, that intention can always be more effectually answered by nourishing diet and generous wines, than by any medicines yet known."

During the last stage two tea spoonsful of sweet spirits of nitre, with twenty drops of antimonial wine in a little water, may be given every hour.

In the cold stage, that is, if it recurs after the first attack, warm and stimulating drinks, such as balm, sage, mint, or centaury teas should be given in moderate quantities. Of course, throughout this, and all other diseases, the bowels should be kept open, and if bilious symptoms appear, a dose of calomel and jalap is recommended.

Patients who have laboured for a length of time under ague and fever, especially if it alternates with dysentery, have often a very morbid appetite, and indeed a continual

sensation of hunger. This ought, if possible, to be restrained, and the food taken should be light and nourishing. A change of air, in such cases, is advisable, with a proper use of tonics and stimulants.

## OF REMITTING FEVER.

We treat, in compliance with the opinion of Dr. Buchan, of remitting fever as a particular disease—but most fevers remit at times: we except only the highest grades. Even the inflammatory, or acute continual fever, and the inflammatory bilious fever, have at times remissions, but these are not always accompanied by sweats. There is, however, an inflammatory fever, not decidedly bilious, and of a milder type than the one of which notice has already been taken, which prevails at all seasons of the year, but most commonly in the summer, and often in situations deemed healthy. It is not attempted here to account for the causes, our duty is to describe its symptoms, and to direct, (having consulted, and freely used, the best authorities,) a mode of cure.

**SYMPTOMS.**—These vary somewhat with the constitution and situation of the patient: generally, however, the fever commences with yawning, stretching, pain in the head and limbs, giddiness, and alternate fits of heat and cold. Sometimes the patient is affected with delirium at the very first attack. There is a pain, and occasionally a swelling about the region of the stomach, the tongue is furred and of a colour between white and yellow. There is sometimes bilious vomiting, the pulse is hard and frequent, though seldom full, and the blood, when drawn from the arm, rarely exhibits signs of inflammation. Sometimes the bowels are costive, though not unfrequently there is a disagreeable looseness.

Remittent fevers sometimes assume an inflammatory, and at others a typhoid or low form. The first is characterized by excessive heat, thirst and pain, often accompanied by a dry skin, and a strong, hard, and full pulse. The last may be known by very opposite symptoms, such

as extreme weakness, nausea, vomiting, dejection of spirits, weak pulse, and often discolouration of the skin.

**TREATMENT.**—This will of course depend upon the form which the disease assumes. Should it have an inflammatory tendency, the mode which we have already suggested under the head of inflammatory fever, would be, with some modification on account of the lesser violence of the disease, appropriate; but if it assume a typhoid form, a more stimulating plan will be required.

Our first object in the cure, is to produce a regular intermission between the paroxysms, and this intention may be promoted by bleeding, if there be inflammatory action; if the disease, however, has assumed a lower grade, and the patient appears likely to sink, this would be highly injurious: a vomit, however, will seldom be improper, and is generally beneficial; fifteen grains of ipecacuanha, combined with two or three of tartar emetic, should be given, and this may be repeated in a few hours, if the vomiting or nausea continues. These symptoms sometimes remain notwithstanding the operation of the emetic, and to remove them, it is necessary to bleed where the pulse will bear it,—but when this is not the case, blisters may be applied over the stomach, to the wrists, or ancles. After the vomiting has ceased, we may empty the bowels with some gentle laxative, as senna tea, cream of tartar, &c. Sometimes, however, the stronger purgatives, as calomel alone, or combined with jalap or rhubarb, are necessary. By this plan of treatment, the fever in a few days, may generally be brought to a distinct intermission. As long, however, as the paroxysm continues with any degree of severity, medicines calculated to produce gentle perspiration, may be of advantage, and great relief from one of the most distressing symptoms, will be afforded, by sponging the patient's body with cool vinegar and water.

When an evident intermission of the paroxysm has been induced, our next object is, by tonics, to enable the system to overcome the consequences of the disease; and with this view, the Peruvian bark, in doses of one dram, should be given every hour during the absence of the fever. If the stomach will not retain the powdered bark, an in-



fusion or decoction of the same with a little orange peel, should be substituted, and to each dose ten or fifteen drops of elixir of vitriol may be added. If the bark excites purging, a few drops of laudanum should be given with each dose. If the bark disagrees with the stomach, or cannot be obtained, a wine-glassful of a strong infusion of quassia of gentian or columbo may be taken every hour; or a strong tea, made of three fourths centaury and one fourth Virginia snake root, may be used in like manner.

Throughout the disease, the diet of the patient should be nutritive and light, excepting that, during the height of the fever, nothing should be taken but thin gruel, or, if the thirst be excessive, barley water, acidulated with a little lemonjuice; or tamarind water, lemonade, and even cold water, if the patient prefers it, may also be moderately allowed.

During convalescence the patient must carefully guard against exposure to cold and irregular habits, which probably would induce a relapse. Moderate exercise, change of situation, generous diet, and the use of bitter tonics, all conduce to the return of strength.

“The most likely way,” says Dr. Buchan, “to avoid this fever, is to use a wholesome and nourishing diet, to pay the most scrupulous attention to cleanliness, to keep the body warm, to take sufficient exercise, and, in hot countries, to avoid damp situations, night air, evening dews, and the like.”

## OF THE YELLOW FEVER.

“Formerly the plan of treating diseases, consisted in little more than watching and palliating the symptoms as they occurred; now, our primary indication is in the forming or preparatory stage to produce a new action, a counter-irritation inconsistent with that of the disease, by which it is either broken up at the access, its course shortened, or its violence essentially moderated. Thus, by a timely counteraction, and by a more regular, early, and efficient support of the powers of life during the

stage of exhaustion, we have the means not only of alleviating a greater portion of the miseries which afflict mankind, but we ought frequently to succeed in curing many diseases that were beyond the reach of our predecessors.”—MINER.

Concerning the nature and origin of this disease, much diversity of opinion has been entertained by medical writers; it is not, however, our proper object to attempt to prove or disprove theories: these indeed, when not founded on a knowledge of facts, have often not only tended to excite the most rancorous feelings among the members of the medical profession, but also to fill the public mind with perplexity and unnecessary fears. It is proposed to dwell only on those points, which are of practical utility.

This disease has obtained its name from the yellow suffusion which usually takes place, in its progress, in the skin and eyes: this appearance is not, however, universal. The disease has received other appellations:—CULLEN terms it, typhus icterodes, but still the long acknowledged, popular title of yellow fever is certainly preferable.

CAUSES.—This part of our subject still remains obscured by doubt and uncertainty. Many able writers have laboured in vain to establish their favourite opinions, and to prove points which must perhaps forever continue subjects of speculation. The greatest number have attributed it to a peculiar state of the air, the physical operations of which, upon the system, they do not understand, and have felt the satisfaction arising from self commendation, when they have informed us that the disease is dependent on exhalations from animal and vegetable putrefaction: this we do not feel disposed altogether to deny, and indeed in support of the doctrine it may be remarked, that most climates experience an unhealthy and pestilential atmosphere, soon, or immediately after exhalations from vegetable putrefaction begin to arise. These perhaps, by becoming diffused, are productive of a variety of diseases, often of a very malignant character.

To attempt a further explanation, would involve us in a labyrinth of difficulties, from which it would be impossible to extricate ourselves.

As to the contagious or non-contagious character of the disease, we would merely refer our readers to the remarks on this subject in pages, 10, 11, and 12, in order that, as much as possible, all repetition of words may be avoided.

A great deal has been written respecting the importation or domestic origin of this disease, and many asserted facts have been adduced, to support both sides of the question. This subject certainly deserves minute inquiry, and in a less practical work, we would esteem it our duty closely to investigate a question which involves the consideration of the necessity or inutility of those restrictions on foreign and domestic intercourse, by quarantine regulations, which are deemed so essential. We admit, however, that there are certain diseases, such as the small pox and a few others, against which it is necessary to guard.

This disease, if not universally, is generally of indigenous growth: sometimes, however, from evidence, the probability is admitted, that vessels from foreign ports, may enclose within their hatches a portion of contaminated air. This is often not liberated, until the cargo is delivered, after the vessel has arrived at the place of its destination. Nevertheless, crews of vessels are sometimes exposed, by entering the hold, to a concentration of this effluvium, and yet they remain healthy.

**SYMPTOMS.**—The generality of writers agree in respect to these. Before the fever forms itself, its approach is indicated by a sudden pain in the head, over one or both eyes, causing not unfrequently, vertigo or giddiness. This symptom, is attended by great weakness and bodily langour, and after a shorter or longer interval, the fever commences with a chill, sometimes violent, which is followed by heat, severe pain in the head, back, and hips, oppression at the breast, nausea, vomiting, delirium, and watchfulness. The eyes are sometimes sparkling, and at other times dull; the pupils are dilated, the tongue is moist, and the skin dry; the patient is generally costive, the pulse is oppressed, small, and mostly hard. This fever has, at times, irregular exacerbations, often one in the evening, or during the night:

these are not, however, generally followed by sweats. The urine is in small quantity and high coloured, and eruptions sometimes appear about the breast. Where the disease is likely to prove fatal, the symptoms of fever continue with violence, and without intermission, often until the third or fourth day, when the pulse fails, the skin becomes yellow, and there are discharges of blood from different parts of the body. The vomiting now increases, and instead of bile, with the contents of the stomach, a dark coloured fluid is thrown up very much resembling coffee grounds. This is supposed to be a peculiar secretion of the stomach, not confined to this disease alone, but appears in some others, which are of a very malignant character: the nature of this liquid is entirely unknown. This vomiting is accompanied by excessive uneasiness, and very soon the extremities become cold, the strength decreases, and in a short time death relieves the sufferer from his complicated miseries. In some instances, this disease runs through its whole course in a few hours.

Where the complaint terminates favourably, much the same symptoms are observed from the beginning, though they are of a milder character, and under proper treatment, often abate in one or two days; but even where they continue longer, they are much less violent than in those cases which terminate fatally. If the patient survives the eighth or ninth day of the attack, there is reason to anticipate a happy issue.

**MODE OF TREATMENT.**—We will state what appears to be the concurrent testimony of the ablest writers on the subject. The principal remedies in this disease, are bleeding and purging, followed by tonics or stimulants: these when properly administered, will often break the chain of disease, and enable the constitution to resume its healthy tone. Frequently, however, either from the great force of the complaint, or imperfect medical treatment, combined with bad nursing, the result of timidity or neglect on the part of the attendants, the disease gains strength, and hastens to a fatal termination. To avoid such a consequence, bleeding should be performed on the first attack, and repeated two or three times a



day, as the violence of the symptoms may demand. It is unnecessary to state the quantity of blood to be drawn, for this of course will depend very much upon the constitution of the patient, and the degree of debility experienced.

It is sufficient to say, that these bleedings should be continued until the high action of the pulse has abated. Every new exacerbation of fever, calls for bleeding. This mode of depletion may be continued until the seventh or eighth day, or even longer, if there be any determinations of blood to the head, heart, or bowels. The pulse for the most part, is to be the guide in relation to this part of the treatment.

Purging is absolutely necessary in this disease, as costiveness is one of the leading symptoms. The purge deemed best calculated for this purpose, is calomel: to quicken its operation, a dose of jalap or rhubarb may be necessary in a few hours; from twenty to forty grains of calomel, may be given according to the constitution of the patient, and the violence of the attack. It is often necessary, before the bowels can be well opened, to administer a purgative glyster.

After several dark coloured stools have been obtained, it is advisable to use moderate stimulants. When the first symptoms are subdued, such cathartics as Epsom salts, castor oil, senna tea well sweetened with molasses, or combined with manna or sugar, may be taken in the place of the calomel. If, notwithstanding the practice we have thus advised, the bowels still remain in a torpid state, a combination of calomel and gamboge, thirty grains of the former and five of the latter, should be made into two or three pills—one to be taken every hour: these articles can be combined with a little crumb of bread and molasses.

As the secretion of bile appears deficient in this disease, a small quantity of calomel, given daily until the complaint is subdued, has been considered by able writers, beneficial.

Having dwelt so long upon the two important points, (viz. bleeding and purging,) it is deemed unnecessary to spend much time in the consideration of other articles, which, if they are not absolutely injurious, have no bene-

ficial tendency in the cure of the disease. As it respects emetics, however, we may with propriety quote the sentiments of a very respectable writer upon this subject. "If," he remarks, "there is any one point, upon which all respectable authors and practitioners agree, it is in the injurious consequences of emetics of all kinds in this disease—but especially of antimonials. Though I have never administered them myself, I have frequently had opportunity to witness their ill effects; such as uncontrollable aggravation of the nausea—very great increase of the anxiety of the epigastrium, (or that region immediately over the stomach)—prominent acceleration of the progress and augmentation of the general violence of disease." Sentiments thus decidedly expressed by so able an author as TULLY of Connecticut, supersedes the necessity of dwelling any longer on this part of our subject.

It may again be necessary to state, that our only dependence in the medicinal treatment of the disease is on the mode already suggested. It sometimes happens, however, when the system is much reduced, by the plan of treatment prescribed, that local pains exist, with vomiting, coma or stupor, &c. Under these circumstances further depletion would only hasten a fatal termination: here blisters come into requisition, and if delirium is present, laudanum may be of service, but it is only in the low stage that this article should be used. If much stupor be present, and the pulse is low, mustard plasters should be applied to the extremities, and wine, wine whey, or volatile alkali, &c. may be given, until the system of the patient rises from the great depression under which it labored. We have, in more than one place, intimated the impropriety of suffering the patient to sink under the operation of medicine.

During the continuance of the disease, there are certain rules, an attention to which will greatly add to the comfort of the sick person, and facilitate the cure. The diet should be light, consisting chiefly of drinks, such as thin sago gruel, lemonade, toast and water, tamarind water, or even molasses and water. These ought to be taken in small quantities, and often; large portions taken

into the stomach at once, might possibly excite vomiting, which is one of the most troublesome symptoms in this disease. When, however, this has been in any way induced, it will often yield to a few table spoonsful of milk given every hour, or a table spoonful of good olive oil administered occasionally. The patient should be placed in a large airy room, and his linen and bed clothes changed every day; these last should be sufficiently light. When there is much pain in the head, cloths dipped in cold water, wrung, and applied to the forehead, will afford great relief. The fæces should be removed from the chamber as soon as possible, and the floor of the room ought to be often sprinkled with vinegar. When the attendants begin to be rewarded for their kind endeavors, by the smile of returning health, the diet may be gradually improved; wine and water, beer, &c. and occasionally ripe fruit may be added, and the moderate use of carriage exercise should be allowed; though as there is great danger of a relapse, fatigue, the rays of the sun, and night air, ought to be carefully avoided.

As yellow fever in different climates, and even often in the same place and season, assumes a variety of forms, a difference in the measures of treatment is often indispensable. And as it would be impossible here to prescribe rules for all its different grades, it must very often be left to the attendant's judgment to modify, in a proper manner, the established practice.

NOTE.—It has been asserted, and perhaps with truth, that the creole nurses in the West Indies are often successful in the treatment of this disease, by immersing the patient, for a length of time, in a hot bath, made of a decoction of bitter herbs, and by administering small quantities of sweating drinks. With this mode of practice we are not acquainted, but believe it deserves attention, proper evacuations from the bowels being previously obtained; observing that it is desirable, in all fevers, to produce a determination to the surface of the body. On this subject see the article SWEATING, in the appendix.

## OF NERVOUS FEVERS.

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INSTEAD of following the technical order usually observed by medical writers, we have, for the sake of explicitness, termed all those fevers Nervous, which have a more direct tendency to affect the brain and nervous system, than to produce an increased force in the action of the heart and arteries. Unfortunately these diseases are numerous, formidable, and often injudiciously treated. Almost every person understands how to give pukes and purges, while but few think sufficiently of supporting the system after their operation.

“What then,” exclaims an able writer, “is the condition of man, in this frail mortal state? has he a disposition to rise above health? Is it the sole business of the physician to debilitate and derange his solids, to abstract and impoverish his fluids, in order to reduce or bring him down to the standard of health?”

This unthinking and inconsistent mode of practice has too long scourged the human race.

It is the opinion of physicians, that nervous fevers prevail more at the present day than they did in former times; they were, however, not unknown in past ages.

We must necessarily attempt the difficult task of endeavouring to discriminate between diseases, which all of them possess many symptoms in common, and which, in numerous particulars, require a similar mode of treatment.



## OF TYPHUS FEVER.

“Typhus is no modern disease, but was known, and accurately described by HIPPOCRATES, more than two thousand years ago, under the *very name* it now bears. His indications were, indeed, the same as ours; and his practice, considering his scanty *Materia-medica*, would be good at this day; as he applied cold ablution, when the body was hot, cleared the stomach, if nauseated, by *mild* emetics, and supported his patients, by the use of the strongest wine. CELSUS fully concurred with HIPPOCRATES, and pursued the supporting regimen still farther. This is by no means the only instance, in which a reference to the ancients, would materially assist modern practice.”—MINER.

The disease which we are about to consider, attacks persons of all ages, but is most severe with those who are in the prime and vigour of life. It occurs at all seasons, but generally during the heat of summer, or the extreme cold of winter. It appears sometimes as an epidemic, and at others in solitary instances. It is found in the healthiest sections of country, as well as in the more sickly; and most frequently in high latitudes.

CAUSES.—With regard to the causes of this disease, physicians are, from the circumstances above mentioned, much in the dark. It appears, however, to be often in a measure dependant on the character of the constitution into which it is received, and often follows exposure to excessive heat or cold, mental agitation, or excess of muscular labour. When it prevails as an epidemic, there is reason to believe, that it depends upon some peculiar state of the atmosphere.

SYMPTOMS.—This disease is mostly preceded by languor, and commences with dizziness, pain in the head and back, and often a dimness of sight; the skin becomes hot and dry, and the tongue furred and rough—a great disinclination to motion is soon perceived; the pulse is very frequent, often beating 120 strokes in a minute, but it is soft and mostly small; sometimes, however, it is

full at the first, and this leads to the mistake of bleeding the patient. The bowels are mostly costive; often in a very few hours, the sick person sinks into a state of stupor and low delirium, without violent raving, and appears insensible to pain or suffering, but requests, incoherently, to be carried home, or removed to some other place. The tongue, in a couple of days, becomes dark, and almost black—the mouth and throat are parched, and a black crust forms on the teeth—the muscular strength is soon much impaired. This fever does not intermit, or even remit.

If proper means are not used, the patient gradually sinks. Sometimes the disease terminates, if it be peculiarly malignant, in the death of the patient, on the fourth or fifth day; but the principle of life very often lingers for ten days or two weeks. The symptoms of approaching death are, involuntary passages from the bowels and bladder; a very hot and dry skin, or cold clammy sweats; a difficulty in swallowing; intermission of the pulse; a glassy appearance of the eyes; a tremor of the nerves, and picking at the bed clothes with the fingers; as well as a peculiar smell which almost always arises from a person who is lying, as it were, in the arms of death, under the influence of fever. This disease is always dangerous.

**MODE OF TREATMENT.**—Here again, before entering on this part of the subject, we shall introduce an extract from the valuable and independent work of Dr. MINER, whose character is too well established to need eulogium, and hope that the intelligent reader will perceive its application.

“There is good authority for asserting, that the individual, personal practice of CULLEN, was much more energetic, than *he* thought *prudent* to recommend in his writings. In common with most authors, he was afraid to hazard his popularity, by entering into minute details of his own private practice, though he was better acquainted with the powers of the *Materia Medica*, than any other physician of his day. Had not his students kept notes of his prescriptions, many of which have for-

unately been preserved, we should have remained ignorant of his energy and decision."

This, like many other fevers of America, requires, when its first symptoms are perceived, a prompt and active mode of treatment. Thirty grains of ipecacuanha should be administered in two gills of warm water, and when the stomach becomes considerably nauseated, water as warm as new milk, ought to be drank freely, until it operates effectually; then five drams of senna should be infused in three gills of boiling water for twenty minutes; this should be well sweetened, and having added to it a half ounce of Epsom salts, is to be drank as soon as it becomes sufficiently cool: after taking the purge, the patient should lie in bed. As soon as this operates downwards, both of these medicines, that is, the emetic and cathartic, are to be assisted in their operation by additional doses, or the use of other medicines.

Next, a tonic and stimulant plan becomes necessary: the patient's situation ought to determine how far this mode of treatment ought to be pushed into operation at the first or succeeding stages of the disease. A combination can be made of a half pint of the compound tincture of Peruvian bark, and a half ounce of the muriated tincture of iron, (see Dispensatory:) of this a tablespoonful is to be used every two hours at intervals between these doses; wine whey sweetened, with nutmeg added, may be used repeatedly—a half gill at a time, until the patient's pulse rises: it should be renewed as soon as necessary. This whey is made by boiling new milk, and adding to it, while boiling, wine sufficient to effect a perfect separation of the whey from the curd; the former should then be poured off and prepared for use. Wine sangaree may be substituted; indeed it is often necessary to use good brandy or whiskey toddy to the amount of from a pint to a quart of either, every twenty four hours, taking care to have small doses frequently repeated during the day and night. A light diet, calculated to support the tone of the stomach, should also be used, as the patient is able to receive nourishment. Panado, prepared with a little wine or brandy, sugar and nutmeg, preserves, jellies, and the like, are

proper. Other tonics and stimulants might be mentioned—for these, we refer to our *materia medica*.

Dr. Buchan justly remarks, that in fevers of a slow or nervous kind, (*he was little if at all acquainted with this disease, which still more emphatically calls for such a mode of treatment, or with the violence of diseases in our climate,*) where there are no symptoms of inflammation, and where the patient must be supported by cordials, brandy, wine, and a generous diet, are the most effectual.

It is necessary that the bowels be kept open through the course of the disease: this can be done by the occasional use of small doses of rhubarb or calcined magnesia, twenty grains of the former, or a tablespoonful of the latter; and often the operation of either is assisted by the administration of injections, which are very serviceable, particularly where there is much prostration of strength, or obstinate costiveness. Blisters are particularly beneficial in the complaint; they may be used after the first evacuations, and kept sore; these should be applied on the inside of the legs below the knees, on the inside of the arms and wrists, and over the region of the stomach. Many have supposed benefit to be derived from the application of a blister to the scalp, it being first shaved. We do not mean to intimate the propriety of applying all these at once, although several may be used at a time with advantage: they have a tendency, in conjunction with the tonic and stimulant plan of treatment, to rouse up the tone of the system. Mustard plasters applied to the soles of the feet, are often also useful.

And last, but not least, in relation to medical treatment, we feel no hesitation in recommending at the commencement of this disease, and after the first evacuations, to place the patient's system under the influence of some degree of mercurial action. This will not interfere with the mode of treatment already directed, and may be done by mixing according to the rule which will be found in the Dispensatory, twenty grains of calomel and three grains of opium, and forming ten pills, one of which should be taken every six hours, until the gums are affected. The patient's bed and linen ought to be kept clean, and the room should be well ventilated: the excrements of



the patient should never be suffered to stand an unnecessary length of time in the room.

As the patient becomes convalescent, the quantity of stimulants and tonics should be gradually abated, and a light, but more strengthening diet administered cautiously in larger quantities, and the danger of relapse from exposure, too severe exercise or intemperance, ought to be cautiously avoided.

We would advise those who have charge of the sick, not to despair, although very unfavorable appearances should offer, and the disease be protracted for many days: indeed, this last is a favorable symptom: very often where the last spark of life seems nearly extinguished, the system becomes, by the judicious use of restoratives, reanimated, and the patient recovers.

## OF THE SLOW NERVOUS FEVER.

This fever is by some considered as merely a milder grade of the one last described: there is, however, an essential difference in many respects between them. It often attacks individuals, without spreading in an epidemic circle.

**CAUSES.**—Nervous fever may be occasioned by whatever depresses the spirits or impoverishes the blood; by grief, fear, anxiety, want of sleep, intense thought, poor diet, unripe fruit, &c. It is common in rainy seasons, but occurs at all times, and proves most fatal to those who live in dirty low houses, jails, or such places.

Persons, whose constitutions have been broken by excessive indulgence in venereal pleasures, by too free a use of mild purgatives when in health, or by any other excessive and especially unnecessary evacuations, are most liable to this complaint.

**SYMPTOMS.**—The nervous fever generally comes on very gradually, and although the patient experiences some trifling indisposition for several days, still he has not reason to suspect the approach of a severe disease: he is affected by low spirits, lassitude, weakness, want of appetite, and watchfulness with a slight chilliness; the

countenance becomes pale and sunk: most of these symptoms are increased towards evening; the pulse is low and quick.

After a few days, these appearances are succeeded by a dry tongue, without any considerable thirst, moderate chills, and flushing of the countenance (the consequence of some fever) by turns: the patient complains of giddiness and pain in the head, especially immediately behind the eye-brows, and has nausea with retchings and vomiting; the urine is pale and watery; the breathing is difficult, accompanied with a sense of depression in the breast; there is a confusion of ideas, and often a slight alienation of mind.

In the progress of this disease, there is a great depression of strength, often even to fainting; whenever the patient attempts to sit up, the tongue becomes dry, and is covered with a dark brown fur; the teeth are also incrustated with the same appearance, and cold clammy sweats break out on the forehead and backs of the hands, while the inside of the hands are hot; the pulse is small, soft, low and frequent, and often intermits with fluttering; the tongue, when put out, trembles excessively; there is a starting of the tendons, with an almost total loss of sight and hearing; the patient mutters to himself, and incessantly picks at the bed-clothes: there is seldom, however, any high degree of delirium, or any apparent fulness of the vessels of the head. The discharges by stool and urine, become involuntary; the pupils of the eyes are dilated; and the scene, if suffered to progress thus far, mostly terminates in death.

This complaint often runs on for weeks, producing such a state of debility as to destroy the sick person from that cause alone: sometimes it terminates in confirmed typhus fever. The nervous fever occasionally remits, and mostly at irregular intervals. Profuse evacuations by sweating and purging, are apt to ensue during its progress; these have a tendency to exhaust the patient.

**MODE OF CURE.**—As there is little in the first appearance of this disease, calculated to excite alarm in the minds of inexperienced observers, it is often too much neglected at its commencement; but, like many other in-

sidious pests of the human race, it makes, although a gradual, yet frequently too sure a progress. We will first insert the remarks of Dr. Buchan on this subject, believing them appropriate—and then offer some further observations.

When a nausea, load, and sickness at the stomach, prevail at the beginning of the fever, it will be necessary to give the patient a gentle vomit. Thirty grains of ipecacuanha in fine powder, will generally answer the purpose very well. This may be repeated any time before the third or fourth day, if necessary; and the above symptoms continue. Vomits not only clean the stomach, but by the general shock which they give, promote perspiration, and have many other excellent effects in slow fevers, where there are no signs of inflammation, and where nature wants rousing.

Such as dare not venture upon a vomit, may clean the bowels by a dose of rhubarb, or an infusion of senna and manna.

In all fevers, the great point is to regulate the symptoms, so as to prevent them from going to either extreme. Thus, in fevers of the inflammatory kind, where the force of the circulation is too great, or the blood dense, and the fibres too rigid, bleeding and other evacuations are necessary. But in nervous fevers, where nature flags, where the blood is vapid and poor, and the solids relaxed, the lancet must be spared, and wine, with other cordials, plentifully administered.

It is the more necessary to caution people against bleeding in this disease, as there is generally at the beginning an universal stricture upon the vessels, and sometimes an oppression and difficulty of breathing, which suggest the idea of a plethora, or too great a quantity of blood. I have known even some of the faculty deceived by their own feelings, in this respect, so far as to insist upon being bled, when it was evident from the consequences that the operation was improper.

Though bleeding is generally improper in this disease, blistering is highly necessary. Blistering plasters may be applied at all times of the fever with great advantage. If the patient is delirious, he ought to be blis-

tered on the neck or head, and it will be the safest course, while the insensibility continues, as soon as the discharge occasioned by the blistering-plaster abates, to apply others to some other parts of the body, and by that means to keep up a continual succession of them till he be out of danger.

I have been more sensible of the advantage of blistering in this than in any other disease. Blistering-plasters not only stimulate the solids to action, but likewise occasion a continual discharge, which may in some measure supply the want of critical evacuations, which seldom happen in this kind of fever. They are most proper, however, either at the beginning, or after some degree of stupor has come on, in which last case, it will always be proper to blister the head.

If the patient is costive through the course of the disease, it will be necessary to procure a stool, by giving him every other day a gentle cathartic, or a clyster of milk and water, with a little sugar, to which may be added a spoonful of common salt, if the above does not operate.

Should a violent looseness come on, it may be checked by giving hourly two table spoonsful of a strong decoction of red oak bark, and with each dose ten drops of laudanum.

A miliary eruption sometimes breaks out about the ninth or tenth day. As eruptions are often critical, care should be taken not to retard nature's operation in this particular. The eruption ought neither to be checked by bleeding or other evacuations, nor pushed out by a hot regimen: but the patient should be supported by gentle cordials, as wine-whey, sago-gruel with a little wine in it, and the like. He ought not to be kept too warm; yet a kindly breathing sweat should by no means be checked.

Though blistering and the use of cordial liquors, are the chief things to be depended on in this kind of fever; yet for those who may choose to use them, we shall mention one or two of the forms of medicine which are commonly prescribed.

In desperate cases, where the hickup and starting of the tendons have already come on, we have sometimes



seen extraordinary effects from doses of musk frequently repeated. Musk is doubtless an antispasmodic, and may be given to the quantity of a scruple three or four times a day, or oftener, if necessary: sometimes it may be proper to add to each dose of musk five grains of camphire. Fifteen grains of musk, with five grains of camphire, may be mixed with a little syrup, and given as above.

If the fever should happen to intermit, which it frequently does towards its decline, or if the patient's strength should be wasted with coliquative sweats, &c. it will be necessary to give him the Peruvian bark. Half a dram, or a whole dram, if the stomach will bear it, of the bark in fine powder, may be given four or five times a day in a glass of red port or claret. Should the bark in substance, not sit well on the stomach, an ounce of it in powder, may be infused in a bottle of good wine for two or three days: afterwards it may be strained, and a glass of it taken frequently.

The bark may likewise be very properly administered, along with other cordials, in the following manner. Take an ounce of Peruvian bark, orange-peel half an ounce, Virginia snake-root two drams: let all of them be powdered, and infused in a pint of the best brandy for three or four days: afterwards, the liquor may be strained, and two table spoonsful of it given four or five times a day in a glass of wine.

It is very necessary in this disease, to keep the patient cool and quiet. The least motion would fatigue him, and will be apt to occasion weariness, and even faintings. His mind ought not only to be kept easy, but soothed and comforted with the hopes of a speedy recovery. Nothing is more hurtful in low fevers of this kind, than presenting to the patient's imagination gloomy or frightful ideas. These of themselves, often occasion nervous fevers, and it is not to be doubted but they will likewise aggravate them.

The patient must not be kept too low: his strength and spirits ought to be supported by nourishing diet and generous cordials. For this purpose, his gruel, panada, broth, or whatever food he takes, may be mixed with wine or brandy, as the symptoms may require. Pretty strong

wine whey, sharpened with the juice of orange or lemon, will be proper for the ordinary drink.

Wine, in this disease, if it could be obtained genuine, is almost the only medicine that would be necessary. Good wine possesses all the virtues of the cordial medicines, while it is free from many of their bad qualities. I say good wine; for however common this article of luxury has now become, it is rarely to be obtained genuine, especially by the poor, who are obliged to purchase it in small quantities.

I have often seen patients in low nervous fevers, where the pulse could hardly be felt, with a constant delirium, coldness of the extremities, and almost every other mortal symptom, recover by using, in whey or gruel, a bottle or two of strong wine every day. Good old claret is the best.

In a word, the great aim in this disease, is to support the patient's strength, and giving him frequently small quantities of the above, or other drinks of a warm and cordial nature. He is not, however, to be overheated either with liquor or clothes: and his food ought to be light, and administered in small quantities.

Although directions have been given, that a violent looseness should be checked, yet it is dangerous to arrest a moderate diarrhœa or purging, which may avert the progress of the disease. There can be no doubt that frequently in fevers, unsought-for discharges by stool and sweating, are often beneficial.

Eight drops of the muriatic or nitric acid, taken in two gills of water four or five times a day, is in nervous fevers, an excellent tonic, and has a tendency, not only to increase the appetite, but also to quench thirst. Sir William Fordyce prefers the muriatic acid; our experience induces us to believe him correct.

In confirmation of the opinion of Dr. Buchan, and of our own in relation to the use of cordials, and also to the kind which it is best to administer, we quote a couple of passages from Dr. Robert Thomas's *Practice of Physic*:

He says, page 48, "To support the patient's strength, it will be necessary to allow a liberal use of wine, which is preferable to all other cordials:" and again, in the

same page, "Wonderful indeed are the effects produced by wine in typhus fever, as we often see persons recover by a free use of it, under the most unpromising circumstances."

Dr. Darwin recommends wine and opium, in small quantities, repeated every three hours alternately, to rouse the system from a state of torpor or debility.

This part of the subject has been considerably dwelt upon, in order to satisfy the minds of those who would perhaps otherwise expect us to offer a long list of tonics and stimulants, calculated to confuse the reader; and which are less easily obtained, and less useful than those which have been mentioned: but we caution those who have charge of the sick, that they use not stimulants to excess. The quantity used, should be proportioned to the degree of debility, the age of the patient, and the effect produced. Spirits are mostly best given in the form of punch; good cider or porter often answer an excellent purpose.

In this disease, it is particularly important to endeavor that the patient's mind may be kept in a cheerful state.

As wakefulness during the night, has a tendency to weaken the system, to cause anxiety, and sometimes create delirium, it is advisable to administer at bed time, if necessary, a pill of opium, containing one or two grains.

The presence of a friend may often tend to soothe the mind and dispel gloomy ideas;—the sick room should be kept quiet, well ventilated, and cool.

## OF THE COLD PLAGUE.

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“The art of physic rarely admits of any perpetual precepts, and the best medicine may do harm, if not adapted to the patient, as well as the disease.”—SIR GEORGE BAKER.

The difficulty is great, and perhaps insurmountable, when we attempt to affix names to diseases which, Proteus like, change their forms in different seasons, and in different parts of the country. We have consulted authorities, and meditated on our own experience, but feel more and more at a loss in endeavouring to define and account for marked affections, which, although all evidently of a strongly marked typhoid character, and influencing very directly the brain and nervous system, appear to spring, at different times, from different causes, and to elude every attempt at particular and individual description.

These diseases, however, possess, in common, through all their changes, certain strongly marked features, which indicate the proper mode of treatment.

We find that the ablest physicians have been in similar situations; and indeed it is only those who have neither knowledge nor judgment, who attempt to divide and sub-divide fevers exactly, and to explain every thing in relation to them.

Dr. Lind, in speaking of a disease which occurred on the bank of the river Gambia, in Africa, says: “In the month of June almost two-thirds of the white people were taken ill; their sickness could not well be charac-



terized by any denomination commonly applied to fevers; it however approached nearest to what is called a nervous fever, as the pulse was always low, and the brain and nerves seemed principally affected; it had always a tendency to frequent remissions. The patients were often attacked with delirium, and ran into the open air, where they received benefit from an effusion of heavy rains on their naked bodies; the delirium, however, soon returned, the pulse sunk, and a train of nervous symptoms followed—their skin often became yellow.”

Epidemical diseases, and even some of those which occur in solitary instances, change many of their symptoms in the course of a few years, so that they can scarcely be said to retain their identity: thus the disease so hostile to life, which is commonly termed the cold plague, has been much modified at different times, periods, and places, especially in its first symptoms; while it is, in all cases, but a modification of typhus fever.

Some have termed it spotted fever, although purple or livid spots on the surface appear by no means universally.

This disease was first noticed in Connecticut, in the year 1771; it appeared in Virginia in 1796; and in and about Cincinnati, and through Kentucky, in 1814—since then it has extended further west. In the winter of 1823–4, a number of cases were witnessed in Scott county, in the state of Missouri.

**CAUSES.**—This disease occurs in the winter season, and mostly, soon after a very cold spell which suddenly follows warm and drizzling, or rainy, weather. We may therefore suppose that this sudden change, at least, predisposes the system to the action of some more direct cause.

It is our opinion, that this cause exists in a certain condition of the atmosphere; for the epidemic generally extends over a considerable tract of country, where local causes could not reasonably be expected to operate alike; and it has prevailed in different parts of the United States, where the customs, modes of living, and the constitutions of the inhabitants, were very dissimilar.

Judging from a measure of personal experience, it

would appear, that the disease is most apt to attack those within its epidemic circle, who live on a meagre diet, and who are exposed, without proper clothing, to the inclemency of the weather. We also have witnessed its influence more especially on those who had not arrived at a full maturity of age. Debility from the protracted consequences of fever and ague appeared a predisposing cause. No class or description of individuals are, however, exempted from this disease.

**SYMPTOMS.**—As it has been intimated, the first symptoms, especially, of this disease, are not always similar, neither is the complaint easily understood, until one or two cases in a neighborhood have run their course. Its access is sometimes marked by the symptoms which have been described, in treating of nervous fever; these symptoms, however, soon give way to others of a more alarming nature—the pulse becomes more full and frequent, but is still soft; this last circumstance it will be well to note particularly. The face is sometimes flushed, and at others pale; the eyes are often red; the tongue is coated with a white fur; there is great restlessness; the countenance is indicative of the utmost anxiety; and delirium ensues, which continues without intermission, and becomes increased and violent. We have seen, in such a case, when the patient had been ill only two days, the abstraction of less than a pint of blood from the arm cause the pulse to sink immediately, so that it could scarcely be felt; the delirium continued, or rather increased, and the sick person died in a few hours.

This form of the disease is not always so rapid in its progress; sometimes the patient lingers for one or two weeks, and then dies. Even through this long period the state of the brain is marked by continual anxiety, restlessness and partial delirium, but seldom by coma or stupor. In the progress of the disease the tongue becomes of a darker colour. It is not uncommon, in these protracted cases, to perceive, before death, purple or bluish spots about the lips, and on the breast and arms, which, no doubt, has given rise to its being called spotted fever. Where the complaint has been protracted beyond three or four days, without violent delirium, there is rea-

son to believe that the patient may be restored to health, by proper means.

With the symptoms which have been described, bleeding should never be used.

This disease sometimes commences its attack in a different form. The patient is suddenly seized with a violent fever; the pulse is full, strong, and hard; there is great pain in the side, and a sense of stricture in the breast; the brain is not so immediately and especially affected at the first: here, according to the opinion of very respectable physicians in this country bleeding is necessary—the operator should be guided by the pulse, as regards the quantity to be taken; the moment it begins to sink, the flow of blood should be stopped. This state of the disease is not of long duration; the determination of morbid action to the brain soon becomes evident; the delirium often amounts to frenzy, and is accompanied with appearances of the most agonizing bodily pain; sometimes the throat is sore, and there is difficulty in swallowing. The thirst is generally extreme.

To give all the various and often contradictory symptoms which occur in this malignant fever, would require the combined exertions of all who have attended the sick; but this we have already attempted to explain.

**MODE OF TREATMENT.**—Something has already been said, although out of the usual order, yet purposely, on the subject of bleeding in this disease. We wish to impress upon the minds of our readers the necessity of caution in this matter. The pulse is generally the best director either for or against the use of the lancet; but in peculiarly malignant diseases, when they are known to be such, the judicious practitioner will take other circumstances also into consideration.

It has been held as a maxim, by the best physicians, “that it is proper to prescribe for symptoms.” Yet there are exceptions even to this rule—for instance, the very symptoms which would authorize bleeding, in a healthy season and healthy neighbourhood, would not, when a deadly typhus fever was making its ravages; at any rate

great caution ought then to be used. The pulse of a sick person in this case often resembles that of a drunkard, highly excited by spirituous liquors; and no one, at all acquainted with medical practice, would bleed a man in that situation, although the pulse seemed to call for it, unless there was strong reason to suspect death from apoplexy.

But when the patient has been previously robust and healthy; when there is much pain in the side and head, and there are evident symptoms of inflammatory action, bleeding should be resorted to as early as possible in the commencement of the disease, under the restrictions laid down when treating of the symptoms; and it may be repeated, if the patient's condition require it.

Twenty grains of calomel, and one grain of opium, should be taken at the commencement of the attack; and in five hours, if there are not free evacuations from the bowels, an infusion of from four to seven drams of senna, according to the constitution of the patient; and three drams of manna, or a half gill of molasses, ought to be administered. If the pain in the side continue, a blister should be applied over the part. If the pulse becomes soft, although full, and the patient is flighty, or in a sinking state, it will be necessary to administer a half gill of good wine every two hours, or as a substitute an equivalent quantity of good brandy or whiskey toddy; also to have a decoction made of a half ounce of bruised Peruvian bark and three drams of Virginia snake root in a pint of water: this should be kept boiling in a covered vessel half an hour; a wine glass full is to be taken at intervals, between each dose of wine or toddy.

If the delirium increases, a large blister should be applied to the back of the neck; and without raising the patient out of bed, the feet and legs should be kept for half an hour in warm water. If the skin is dry, bladders containing warm water, should be laid to the sides: light nourishment ought to be given when it can be taken, and warm teas in moderate quantities as drink; but cold water should be denied, as it would sicken the stomach and interfere with the course of treatment directed. The stimulant and tonic plan should be increased or varied.



as it is found necessary, in order to impart a tone to the patient's pulse, and to keep up the system. The delirium will be found to increase, if the stimulant and tonic plan be neglected for any length of time.

In this, as in all other diseases, we recommend not stimulating to excess; different quantities are required by different individuals, and much depends upon the previous habits of the patient. Besides the blister behind the neck, others should, if it be necessary to rouse up and animate the sick person, be applied to the legs and arms. Where the brain is exceedingly affected, benefit will be derived from the application of cloths, dipped in cold water, to the head, and by mustard plasters applied to the soles of the feet, and to the forehead.

Filling the stomach with weak teas, is very injurious, as it debilitates the system, and often causes puking. Injections ought to be used, if the bowels need evacuation.

The whole mode of practice should be prompt and decisive.

When, on the attack of this disease, the pulse is not strong and remarkably hard, but either full or small, and rather soft and frequent, and the distress of the patient is particularly referable to the head, bleeding is by no means to be admitted.

Six drams of senna with two tea spoonsful of ginger, should be infused, in a half pint of boiling water, in a covered vessel for half an hour, and then strained, well sweetened with molasses or brown sugar, and administered. The patient may, in the course of two hours, drink gruel to facilitate the operation; should it not prove speedy, injections ought to be given. The injections should be large, and may be made of molasses and water, or flaxseed tea, each containing a table spoonful of common salt.

As soon as an effectual operation is obtained from the bowels, it will be advisable to give two grains of calomel every four hours, each dose combined with the fourth of a grain of opium, until the gums become sore: these small doses can be obtained, by rubbing together, until they become incorporated, sixteen grains of calomel with

two grains of opium, and then by dividing the whole into eight powders: if the calomel purges, twenty drops of laudanum may be given at night.

A preparation of Peruvian bark and Virginia snake-root, should be prepared as last directed, and a wine glassful of it administered every two hours, between the doses of calomel and opium. A blister should be placed on the back of the neck immediately after the operation of the purging medicine; and cloths dipped in cold water, ought to be applied over the scalp. If the pulse intermits, or is remarkably soft although full, or is small; wine &c. ought to be administered.—A very useful stimulant in this case, is camphor, five grains of which, rubbed up with a little sugar, may be given every two hours,—at the same time, the lower extremities are to be kept warm by proper covering, and by bladders filled with warm water, bricks or stones heated, dipped in water, and wrapped in flannel. Chamomile, balm, or sage teas, with the addition of a little vinegar. are suitable, when given in moderate quantities, to allay the patient's thirst.

Blisters, in addition to other tonics and stimulants, are much to be depended on, and at option, a large one may be applied over the whole scalp, it being shaven: by wetting the blister with spirits of turpentine, the operation will be much expedited.

It will be found that many remarks on both parts of this subject, are mutually applicable, and it is not necessary to enter into similar particulars under each head.

Whenever a case is protracted, there is just ground for hope. Much depends upon nursing in this complaint; nourishing but light food should be given to the convalescent, the tonics and stimulants should not be discontinued suddenly, and great care ought to be taken to prevent a relapse, which often proves fatal.

We conclude these observations, in which, as far as conscience and judgment would permit, we have leaned to the admission of the depleting plan recommended by respectable medical men, with remarking, that in every form of the cold plague, it is advisable to beware not only of the lancet but of excessive depletion by repeated purges and sweatings. Brandy, wine, camphor, opium,

and even red pepper, with such suitable nourishment as can be received, and blisters, will generally be found, after reasonable evacuations, the most effectual agents in removing the disease.

Indeed, in some cases, the prostration of the patient is so sudden, that there is scarcely time to wait for the operation of a dose of senna or ipecacuanha, before it is necessary to commence with the tonic and stimulant plan.

Where the progress of the disease is not very rapid, small doses of calomel with opium, as we have recommended, in order to excite a slight salivation, will be found also eminently useful.





## INTRODUCTION

TO

## LOCAL DISEASES.

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HAVING considered those fevers which appear to influence primarily and especially the whole system, we now turn to the notice of local diseases.

It is not our business to make casuistical distinctions, but to write, if it be possible, and it is not an easy matter, simply. Many, and indeed most complaints, are accompanied by a fever, which is symptomatic or consequent to local irritation—thus consumption, measles, small pox, &c. are all attended with remitting, intermitting, or continued febrile action. Professor RUSH, of Philadelphia, asserted, that “disease was an unit;” meaning there were but two states or conditions of body, one of health, the other of sickness: this sounds well, and is true in the abstract, but would illy suit as an axiom to be used in a popular work on medicine.

Men of genius have often fled, and even RUSH, the father of medical science in America, sometimes diverged from the track of practical usefulness.

According to the common acceptation in which our language is received, diseases are various, numerous, and complicated; and all that can be done by us, in the present state of human knowledge is, after consulting

the best authorities, to designate these diseases as particularly and distinctly as possible, so that even the unlearned may have a chance to avoid the calamities which are consequent to ignorance.

To prescribe for the *name of a disease* however would be folly, it is always advisable and necessary for a judicious person to see and notice, particularly, the symptoms. Many complaints, it is certain, are very separate from each other in their nature. The pleurisy could not well be mistaken for the small-pox, or the measles for the whooping cough, and in affections which commence with a local origin, there is a greater freedom from difficulty, in distinguishing their characters, than in fevers, which vary their forms much more, and frequently change unexpectedly, from an inflammatory to a typhoid, or nervous type.

Both sexes and all ages are liable to these diseases, as well as to those of which mention has already been made. The doses of medicine, and the whole mode of treatment, will be again directed for adults; the situation of females in a state of pregnancy, and that of infants, will be considered in proper places.

## OF THE SICK STOMACK.

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WITH this singular and interesting disease, we candidly profess but little personal acquaintance; and will therefore offer freely, selected observations from those physicians who have been conversant with, and who have written on the subject; together with some remarks which naturally spring from investigation. The mode of practice recommended, will be found more energetic than that usually employed.

CAUSES.—The testimony of various physicians, collected by Dr. William B. Chamberlin, of Indiana, tend, instead of elucidating, to throw a greater shade of obscurity over the causes of this disease. Neither does this impeach the judgment or correctness of any of these gentlemen, but it points to the accuracy of our preliminary observations, under the head of cold plague.

Dr. Crookshank,\* in an interesting paper on the subject, seems disposed to ascribe, as the cause, the condition of the water at certain seasons, in particular streams or rills, in consequence of its being impregnated with some mineral poison; he does not himself, however, if we understand him, deem his opinions satisfactorily proven.

Many have been very confident that the disease is owing to drinking the milk of cows, or eating the flesh of animals that had fed on some poisonous vegetable; others

\* For the use of Drs. Chamberlin and Crookshank's papers on this subject, we are indebted to the Ohio Medical Repository, a semi-monthly paper, edited by Drs. Wright and Mason of this place.

deny this, and consider it to be an epidemical disease, depending on a peculiar state of the atmosphere; or an endemic,\* and caused by certain gasses or exhalations proceeding from the earth; still, however, communicated through the medium of the air.

It seems that the causes of this disease, are not yet distinctly known, or if known, they are very far from being generally acknowledged. It has extended its influence over several parts of Ohio, Indiana, Kentucky, and Tennessee, and appears, from accounts, to have been confined to no particular soil or location, in parts which it has visited.

**SYMPTOMS.**—In describing the first symptoms especially, of this disease, authors differ considerably; this tends to show that the appearances are not uniformly the same. Professor Drake states from information which he had received, that “It almost invariably commences with a general weakness and lassitude, which increase in the most gradual manner. About the same time, or soon after, a dull pain, or rather soreness, begins to affect the calves of the legs, occasionally extending up to the thighs. The appetite becomes rather impaired, and in some cases, nearly suspended; sensations of a disagreeable kind, affect the stomach upon taking food; however, a greater disposition for it is generated, by taking a little, and more agreeable feelings are introduced throughout the whole system.

Intestinal constipation (or costiveness) in this, as in all subsequent periods of the disease, exists in a very high degree; a strong propensity to sleep occurs, and according to Dr. Barbee, the pulse is full, frequent, round, and somewhat tense, but regular. During this stage, exercise of any kind, is highly detrimental, and if persisted in, soon produces loathing and nausea at the stomach.”

“If the patient reposes upon first experiencing these symptoms, they generally cease, and he is allowed a

\* Diseases which are peculiar to certain limited tracts of country, are termed *endemic*.



longer exemption from the vomiting that awaits him: Sooner or later, however, that symptom almost invariably succeeds the situation we have described, and either proves fatal in one, two, three, or more days, or leaves the patient in a very exhausted state, from which he recovers, to sustain, at no distant period a repetition of the attack."

"The matter puked up, is sometimes bilious, but much oftener sour, and frequently so acid, that its action on the throat, in one case, (which proved fatal) was likened to boiling water.

Towards the close of mortal cases, it is occasionally very dark coloured; the patient has a disagreeable burning sensation in his stomach, and hot eructations (or belchings) are very troublesome. The thirst is considerable, the breath is peculiarly disgusting and loathsome. Emigrants are not particularly liable to this disease, which prevails (though not exclusively) in aguish situations; and intermitting fevers are thought to have declined since its appearance."

Dr. Chamberlin observes, that in the first stage "the pulse is soft, weak and slow, tongue natural, extremities cold, skin cool, countenance pale, mind calm, and the bowels torpid." Dr. Crookshank says, that "Previous symptoms, such as are common to bilious complaints, often precede; but it not unfrequently happens, that without any previous symptom to be noticed, even by the patient himself: on rising from a hearty meal, he is seized with vomiting, and other symptoms, resembling those of common water-brash, to which the disease, in its first stage, bears a strong resemblance: the puking is repeated at intervals of from fifteen to thirty minutes."

Then follows, he says, after repeated pukings, "a burning sensation in the stomach, with more or less thirst, sometimes excessive, for cold water, which is no sooner swallowed than rejected, or at furthest, in a few minutes: these symptoms are followed by coldness of the surface, especially of the extremities, the features become shrunk, the eyes are rolled up, and the pupil is rather dilated, there is intolerance of light, and the whole countenance appears of a ghastly hue; with great prostration of

strength, both of the muscular and mental powers, yet no delirium, until the last stage of the complaint, and even then not invariably. Obstinate costiveness is most frequently, but not always present; the pulse is generally soft and slow, gradually increasing in frequency as the disease progresses."

In another place he says, "Besides the above, there have been cases where the patient did not vomit, some of which too, were attended with diarrhœa, and others in which there appeared to be actual inflammation of the stomach;" and further "I have raised even patients apparently gone, by happily producing catharsis, (or purging) and at length removing worms, which occurs not unfrequently in countries where people are in the habit of subsisting on coarse, indigestible, and illy prepared food—such as hominy, samp, and coarsely ground Indian meal."

According to Dr. Chamberlin, "The persons most liable to this affection, are those of youth and middle age. Males and females appear to be equally liable to its ravages. It however sometimes affects all who are equally exposed to its remote cause, whatever that may be."

Professor Drake states, that "This disease is unequivocally observed to affect four domestic animals, the horse, the cow, the sheep, and the dog. It is often fatal to the two former, but not so fatal to the latter. It as frequently attacks horses in the winter as the summer, and sometimes kills them in twenty-four hours."

**MODE OF TREATMENT.**—With regard to the treatment of this disease, practitioners, so far as we have been able to ascertain, do not very much differ. The two most prominent features of the complaint are vomiting and costiveness, and it is necessary that proper evacuations be obtained from the rectum, before the inverted action of the alimentary canal, evinced by puking, can be expected permanently to cease. The principal difficulty then, is to have cathartic medicines retained a sufficient length of time on the stomach, for them to operate downwards.

In the first place, we would, with Dr. Crookshank, if

the pulse be full and hard, bleed: this will have a tendency to diminish the irritability of the whole system. A large blister, wetted with spirits of turpentine, should also be applied over the region of the stomach; this is certainly, with the utmost propriety, recommended by those who have written on the subject. The patient should lie quietly as possible in bed, with the head not raised too high; and one or two stimulating injections ought to be administered: these injections may consist of tolerably strong soap suds, or, each one, of two ounces of glauber salts, dissolved in a pint of warm water.

After the contents of the stomach have been evacuated, an attempt may be made to check the vomiting, for a time, by giving every hour, for three hours, or oftener in the time, if it is puked up, a tea spoonful heaped, of finely powdered charcoal, mixed in a wine glass full of new milk. The patient should not sit up to take the medicine, but have it administered while in a recumbent posture. If the thirst be very great, a little balm or mint tea should be given, but no water.

The conjoined influence of the blister, the injections, and the charcoal, with the posture in bed, will, in all probability, check, for a while, the vomiting. As soon as the stomach becomes a little composed, thirty grains of calomel and two grains of opium, should be given in a little syrup. After taking this, the patient ought still to continue quiet, and on no account attempt to get up, if it can possibly be avoided: a table spoonful of ginger tea may be taken occasionally, if it does not disagree with the stomach. The blister over the stomach, when taken off after having drawn well, should not be dressed with cabbage leaves, the smell of which often sickens the patient; but with basilicon ointment. For the preparation of this, which is simple, see the dispensatory.

We have consulted, since writing the above, other views which have been entertained on the subject of this disease, and feel not disposed to follow any one implicitly: indeed nothing has been written sufficiently explicit for a work of this kind. If a blister over the region of the stomach, should prove insufficient, with the means recom-

mended, to check the vomiting for a time, other blisters ought also to be applied to the arms and legs, and mustard plasters to the soles of the feet. The patient had much better suffer temporary pain than to linger for days under a most distressing complaint, and moreover, one in all probability likely to prove fatal. These blisters should also be moistened with spirits of turpentine, or the tincture of cantharides.

Calomel is not easily rejected by vomiting, after it has been retained on the stomach a short time; and to assist its operation, an infusion of five or six drams of senna, and a table spoonful of sweetened ginger, ought to be given, commencing in four or five hours after the administration of the calomel, the dose of which, if necessary, may be repeated.

Dr. Crookshank recommends, in preference to the above plan, giving castor oil highly charged with calomel, (that is, having a considerable portion of calomel mixed with it) a tea spoonful at a time, with the addition of ten or fifteen drops of laudanum to each dose, immediately after every vomiting, or every hour at furthest, until purging follows; but even in this, he says, he has sometimes failed.

We believe that the plan of treatment laid down in the first instance, and which is in part new and altogether severe, will check the violent symptoms of this formidable disease; reasoning from close analogies, we feel the more confident in this opinion. If, however, neither the calomel nor senna, with injections, should operate downwards, there is a vegetable medicine to be obtained in the large towns, which is of still more certain efficacy. For an account of this article, the Croton oil, the reader is referred to our dispensatory; a dose of this, from two to five drops, may be taken.

When active purging has commenced, and the sickness of the stomach has consequently abated, it is advisable to give the patient a little porter, ale, cider, wine, or brandy toddy, and to tempt the stomach with a little food, as directed in the article on nursing, keeping up still the action of some of the blisters. Professor Drake remarks, that "wine and salted meats have appeared to



do good, and are relished beyond every thing else." Salted meat should, of course, be given with caution, and in moderate quantities.

The patient's stomach should never be filled with insipid drinks of any description. Sometimes chicken broth will be found grateful and useful. When the bowels are well opened, it will be necessary to keep them so for several days, as in this disease there is a great tendency to a relapse: this may be done by giving aloes in pills, three grains in a pill, four of these to be taken within twelve hours after the first medicines have ceased operating: supporting the patient in the intervals, between the operation of the medicines, with nourishing but easily digestible diet, in small quantities; as stimulants, wine and porter are particularly recommended.

If aloes cannot easily be obtained, senna or Epsom salts may be taken. The quantity of purging medicine which should be used for some weeks occasionally, if it be necessary; may be diminished gradually. The patient should be particularly careful not to use much exertion, until the stomach has recovered its tone in a considerable degree, and bodily strength has been recruited to a considerable extent.

Indeed those who possess strong constitutions, and are accustomed to much exercise when in health, too often expose themselves unnecessarily and imprudently, from an anxiety to *get about*, when they are scarcely able to rise, without help, from the couch of sickness.

## OF PLEURISY.

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PLEURISY is an inflammation of that membrane which envelopes the lungs, and lines the inside of the chest. This disease is marked by acute pains in the side, difficulty of breathing, and a full, quick, and hard pulse.

It may be known from that species called the spurious, or bastard pleurisy, by the pain in the latter being more external, and chiefly affecting the muscles, between the ribs. The general symptoms of the last disease also are often less severe, and require, for the most part, less active remedies than the disease under consideration.

**CAUSES.**—Whatever has a tendency to obstruct perspiration; exposure to cold winds; drinking cold liquors when the body is hot; plunging into cold water, or exposure to cold air, when covered with sweat, will often induce pleurisy.

It may be occasioned also, (according to Dr. BUCHAN,) by a too free use of strong liquors; by the stoppage of usual evacuations; and by the sudden striking in of eruptions, such as the itch, the measles, or the small-pox. It may likewise be induced by violent exercise of any kind, or by blows on the breast.

**SYMPTOMS.**—Pleurisy, like most inflammatory affections, comes on with a degree of chilliness and shivering, followed by increased heat over the whole body; and a sharp pain in the side, which is generally most violent when the patient draws in his breath; with a

difficulty of lying on the side affected;\* and with cough and nausea.

The pulse is hard, strong, and frequent, and vibrates under the finger, when pressed upon, like the string of a musical instrument; the urine is high coloured; and if blood be drawn off, and is allowed to stand for a short time, it will show on its surface a thick buffy coat.

When the disease is entirely neglected, or feebly treated at its onset, the inflammation does not always confine itself to the membrane which covers the lungs, but often extends to the substance of this organ.

In forming our opinions as to the probable termination of the disease, we must be guided by the severity of the symptoms. If the fever and inflammation have been high, and the pain should suddenly cease, with a change of countenance and sinking of the pulse, great danger may be apprehended; but if the heat and other febrile symptoms abate gradually, if respiration be performed with greater ease and less pain, and there is a free and copious expectoration, a speedy recovery may be expected.

**MODE OF TREATMENT.**—Our chief object in the treatment of pleurisy is to subdue the inflammatory action, and with this indication in view, the path is perfectly plain. Where the pain in the side is violent, and the pulse quick and hard, bleeding is indispensably necessary, and the quantity to be taken must be regulated by the strength and age of the patient. It is sufficient to state, that as much should be immediately taken as the patient can bear, for a large quantity of blood abstracted at once, in the beginning of this complaint, does more good than small and repeated bleedings.

If after the first blood letting, the pain in the side continues, and the pulse remains quick and hard; it is necessary to repeat the operation. If the symptoms do not abate, and the blood continues to have a buffy coat, a third, or even a fourth bleeding is requisite.

\* In some cases of this disease, the pain in the side precedes the chilliness and shivering.

When the pain in the side is measurably subdued—when the patient spits more freely—and the pulse becomes softer and more natural, it is not necessary to bleed.

Here it may be proper to remark, that medical men have become conscious of the beneficial effects evinced by drawing blood from a *large* orifice, in inflammatory affections. This is certainly a truth of importance, and will particularly apply to the treatment of this disease. We know that from a small orifice, an equal quantity of blood may be drawn as from a large one, but not in the same period of time; and in local inflammations it is always best to abstract blood suddenly: this produces an immediate and powerful effect upon the system.

When, notwithstanding repeated bleedings, the pain in the side continues, relief will be obtained by the application of a large blister over the part affected. This has a tendency not only to allay pain, but also, in a degree, to remove the internal inflammation, by counter excitement. Sometimes, in consequence of the blister, the patient has great difficulty in making water, which comes away by drops, and, in its passage, produces a scalding sensation. To avoid this unpleasant symptom, the patient, while the blister is drawing, should be directed to drink freely of flaxseed tea, barley water, or a solution of gum arabic. Where the pain is trifling, or the patient opposes the application of the blister, cloths wrung out of a warm decoction of bitter herbs, or bottles filled with hot water, should be applied in its place, though an equal effect from their use is not to be expected.

It is a general rule, to which pleurisy is by no means an exception, that in affections of the chest strong purgatives are for the most part injurious, as they are found to determine the blood to internal parts: therefore, in the beginning of the disease, it is best to empty the bowels, if necessary, by gentle laxatives, such as Epsom salts and manna or an infusion of senna; a clyster of thin water gruel, or barley water, combined with two table spoonsful of molasses or sweet oil, may be ad-



ministered, in order that the bowels be kept gently open throughout the disease.

The expectoration or spitting may be promoted by oily and mucilaginous medicines, which should be frequently given in small quantities. A compound of the mucilage of gum arabic and the syrup of squills, together with a little mint water, may be used with benefit, if it is taken frequently. This will not only aid the expectoration, but will likewise sheathe the throat from acrid matters thrown out, and in a measure prevent the frequent fits of coughing. Should these medicines prove disagreeable to the patient, a solution of gum ammoniac, (*see Dispensatory*) in a little barley or mint water, may be given three or four times a day.

Another important object in the treatment of this disease, is to excite perspiration. This may be effected by means which will be pointed out in the *Dispensatory*, in the article on *Sweating*.

There is one medicine which has been deemed almost a specific in pleurisy: it is a decoction of the Seneka snake root. It is to be given after bleeding and other evacuations have been resorted to. The quantity to be taken must be regulated by the state of the stomach. If it should occasion vomiting, some peppermint tea may be added, or a smaller quantity given. As this medicine promotes perspiration, and a discharge of urine, it is very likely to be serviceable.

When, however, the system is much excited, this article would be improper.

Ipecacuanha or antimonials, given in doses too small to excite vomiting, likewise possess the power of determining the circulation to the surface of the body, without much exciting the system. These, therefore, may be given: dissolve two grains of tartar emetic in twelve table spoonsful of water, of which one may be taken every two hours, until perspiration is induced. To increase the effect, the patient should take occasional drinks of some warm liquor.

Throughout the whole course of the disease, the patient must abstain from all food which is of difficult digestion, or that affords too much nourishment. Flesh,

butter, cheese, eggs, milk, fermented and spirituous liquors, indeed every thing that is of a heating nature, should be avoided.

The strength of the patient may be supported with gruel, sago, barley water, or a cold infusion of the inner bark of the slippery elm. The food and drinks should be taken in small quantities, and sufficiently often to keep the mouth and throat constantly moist. When the pain and fever are gone, and the patient has recovered sufficient strength, it will be necessary generally to open the bowels with some gentle purge. The diet also ought, for some time, to continue light, and of easy digestion.

What is called the crisis, or height of fever, is sometimes attended with very alarming symptoms; such as difficulty of breathing, an irregular pulse, convulsive motions, &c. These are apt to frighten the attendants, and induce them to act improperly. If the patient's strength, however, be much exhausted by the disease, it will be necessary to support him with frequent small portions of wine whey or the like.



## INFLAMMATION OF THE LUNGS.



As this disease affects an organ, the proper exercise of whose functions is absolutely essential to life, it must be always, of necessity, attended with danger. It is generally more fatal to such as have been afflicted with asthma, and to persons in the decline of life. Sometimes the inflammation is seated in one lobe of the lungs only, at other times the whole organ is affected.

Inflammation of the lungs has been divided into the *true*, and *spurious* or *bastard* species. Where it arises from too great a determination of blood to the lungs, obstructing the vessels of this part, it receives the appellation of *true*; when, however, the obstruction arises from a *thick viscid matter*, it is called the *spurious*.

**CAUSES.**—This disease is occasionally the consequence of other affections of the breast, such as pleurisy, &c.; it is, however, not unfrequently a primary complaint, proceeding from the application of cold to the body, which gives a check to perspiration, and causes an excessive flow of blood through this delicate organ. Other causes may be enumerated, such as violent exertions in speaking, singing, or playing on wind instruments, and severe exercises, all of which have a tendency to increase the action of the lungs.

True inflammation of the lungs generally attacks those of a robust constitution and full habit; men are therefore more liable to it than women. It occurs most frequently in the winter and spring, or indeed whenever there are sudden transitions from heat to cold.

**SYMPTOMS.**—This disease is marked by acute fever, with the face of a livid colour and somewhat swelled; there is dull or severe pain in the fore and upper part of the chest; cough, dryness of the skin, with thirst. The pulse, for the most part, is sometimes hard, but mostly soft, which especially distinguishes it from pleurisy, but in the latter stages it becomes weak, and often irregular. The cough, at the commencement, is attended with a thin expectoration, which becomes, in the progress of the disease, thicker and more copious, and a matter of various consistence and colour is thrown up—this is often streaked with blood.

Inflammation of the lungs sometimes terminates favorably, by a spontaneous discharge of blood from the nose; by an easy expectoration of thick yellow mucus; and by the deposition of a brick coloured sediment in the urine. In forming our opinions as to the probable result, we are to be governed by the state of the symptoms.

When the fever is attended by delirium, the danger is always great. The difficulty or ease of respiration, which denotes hazard when it can be performed only in an erect posture; and the greater or lesser violence of the cough, which is most favorable when moist, and the phlegm easily expectorated. Yet this disease is often highly deceitful in its symptoms, and with a form apparently mild and little alarming, proceeds rapidly to a fatal and unlooked-for issue: particularly in low, wet situations, and during an open rainy winter. Hence the slightest appearance of it should always be considered important.

**MODE OF TREATMENT.**—In the treatment of this complaint it is necessary to pursue the depleting plan to its utmost extent.

Bleeding should be resorted to as soon as possible, and the quantity of blood to be drawn ought to be proportionate to the state of the pulse and the vigour of the constitution; but if the difficulty of breathing and pain are not relieved, the operation should be repeated until relief is obtained, without regard to the state of the pulse. So long as any sharp or darting pains remain, there is an indication for bleeding.

When, by general bleeding, the system is reduced, or when the disease has occurred in debilitated subjects, topical bleeding by cups or leeches applied to the breast will often be indicated.

After general and local blood-letting, the next step is to inflame the skin immediately over the affected part, by the application of a large blister, and should this show a disposition to heal up too speedily, a fresh one ought to be applied in its vicinity, so that the external irritation may be continued as long as is necessary.

If the bowels are costive, some gentle laxative should be used, such as castor oil, Epsom salts, and the like. The stronger purgatives should be avoided, as frequent and copious purging has a tendency to prevent a free expectoration, which in this disease is useful.

The remainder of the treatment in cases of Inflammation of the Lungs being so strikingly the same as that



mentioned in Pleurisy, to avoid repetition, we simply refer our readers to what has been written on that subject.

It has been already remarked that a *spurious* or *bastard* form of inflammation of the lungs is occasionally met with, and that it is caused mostly by a thick viscous matter obstructing the vessels of that organ. This disease generally attacks the old and infirm in the winter, and in the wet changeable seasons of the year.

It generally begins with alternate chills and heats, flushing in the face, pain and giddiness in the head, the breathing is difficult, with a sense of weight upon the breast, the urine is pale, the pulse often full, quick, irregular, and compressible. In many instances this disease is accompanied by great prostration of the vital powers. A cough also is present, not unfrequently attended with some expectoration, and often with the throwing up of a considerable quantity of tenacious matter.

Persons most liable to this complaint are, for the most part, the old and infirm, or such as have been debilitated by previous excesses; the more immediate causes are generally those which produce pleurisies, &c.

**MODE OF TREATMENT.**—When there is much pain and difficulty of breathing in the commencement, bleeding, to a greater or lesser extent, is indispensably necessary, in order that the blood may be enabled to pass more freely through the lungs. This course should be regulated, in a great measure, by the state of the pulse, the severity of the symptoms, and the powers of the constitution.

Where the local and general symptoms are mild, the lancet should be used with very great caution, or neglected altogether; for as the complaint mostly occurs in weak and elderly persons, great harm would probably result from the debility thus induced.

To relieve difficulty of breathing, a large blister ought to be applied over the chest, and if there is any nausea present, a gentle emetic may be administered, soon after

bleeding. When the emetic has done operating, small nauseating doses of tartar emetic, or of ipecacuanha, should be given, to excite sweating. In order that this effect may be continued for some time, the medicine ought to be repeated every two or three hours, and assisted in its operation by drinking warm teas. At the same time, to produce expectoration, a decoction of Seneka snake root and liquorice, or the syrup of squills, will be often found useful. Or take of gum asafoetida three drams, and rub it down in six ounces of mint water; of this a table spoonful, together with five drops of antimonial wine, may be given as often as circumstances require.

The fumes of rosin have been recommended by Dr. Rush, and in some instances, have been found very beneficial.

Where the bowels are costive in this complaint, emollient clysters, or the milder laxatives, only are admissible.

If, notwithstanding the course of treatment above recommended, debility increases, the oppression continues, and the spitting is not free, the volatile alkali, made into large pills, with the conserve of roses, or sugar and powdered gum arabic, with the addition of lavender or mint water, should be frequently given—each dose containing five or six grains of the volatile alkali.

Wine whey, in alternation with a decoction of the Seneka snake-root, may also be used in quantities, always to be regulated by circumstances.

When this form of disease is combined with bilious intermittent fever, (which is not unfrequent in the southern states during the fall, and beginning of the winter season,) as soon as the inflammatory symptoms have been subdued, decoctions of Peruvian bark and Virginia snake-root, or infusions of gentian, Columbo, or quassia, with the addition of a little brandy or good whiskey, if the previous habits of the patient should require it—will be advisable, in the absence of fever, together with wine whey, and a mild, nourishing diet.

## OF CONSUMPTIONS.

A CONSUMPTION is a wasting away of the whole body accompanied with tubercles,\* or with ulcers in the lungs, hectic fevers, and night sweats.

Consumption may be owing to a number of causes, and is frequently connected with other complaints. The most prominent causes will be mentioned, as this will assist in guarding our readers, in many instances, against the attacks of an insidious foe. Some precautionary advice will also be offered.

Here we insert a very interesting article afforded us by a medical gentleman of this city.

"Consumptions do not prevail so much in the western country, as in the middle and eastern Atlantic states, yet the disease is by no means uncommon in some parts of this, and in the more southern sections of the western country; especially that kind of pulmonary disease which is produced by a functional or organic derangement of the digestive system, and is known by the distinguishing name of "*dyspeptic consumption*." This species of consumption occurs oftener in this country than any other kind, and for the last ten years, the ratio of increase, it is thought, far exceeds the increase of population. We think ourselves warranted in saying, that the number of cases of this kind, occurring originally in this country, far exceed the aggregate amount of all other kinds of consumption; for it will be re-

\* A tubercle is a tumor or kernel, much resembling a gland—it is the product of diseased action, and eventually becomes ulcerated.

membered, that many cases of tubercular or imposthumous consumptions, are imported from the northern or eastern states. Most of those imported cases, where they are not too far advanced, and irremediably confirmed previously to the patient's leaving the climate where the disease commenced, are either cured or palliated by the atmospheric influence of the western and southern states. But many of these cases are often too far advanced for the patient to derive much benefit by such a removal; and consequently he dies soon after arriving in this country, adding thereby to our list of deaths from consumption.

The cause of this form of the disease, is *dyspepsia*; but why dyspepsia should produce consumption in one case, and some other disease in another, is unknown.

The laws of dependency, or, as it is generally called, *sympathy*, that exist between the different organs of the body, is a principle long observed and admitted. Where one organ is diseased, others will, sooner or later, put on diseased action, in consequence of some relation or reciprocal dependence existing between them and the first affected part.

In cases of aggravated dyspepsia, occurring in persons, who are predisposed to pulmonary diseases, either by inheritance or accident, and this dyspeptic condition occurs in early life, when the paroxysms are excited by almost every change of the weather, and aggravated by every little indulgence in diet or drink, the disease will almost certainly terminate in consumption.

In the first place, the diseased action is often circumscribed, and principally confined to the digestive organs. These become depraved in their functions, breaking up the balance of the circulatory system: obstruction of the liver follows, preventing a return of the blood which passes through the liver to the right side of the heart; every organ concerned in the process of digestion becoming thereby congested, their functional derangements increased, and the secretions are vitiated; the chyle becomes depraved and unfit to enter into the circulation, but compelled to enter it, is consequently injurious to every part, more especially those parts of the system, which, from



their mal-formation, or from debility, consequent to some former disease, are more debilitated than other surrounding parts.

Another cause why the lungs so often suffer from dyspepsia, is that the imperfect and vitiated chyle has first to pass through them and receive purification before it enters the general circulation, consequently disease falls on this organ, which must first meet and conquer the enemy.

When the circulation of the blood, and the sensibilities of the system, experience any irregularity of distribution, the whole frame seems to languish in debility; for the parts to which too much blood is directed, are not strengthened, while those parts which are deprived of their due share, must be weakened.

This is precisely the situation in the commencement of dyspeptic consumptions. The blood is accumulated in the various digestive organs, while other parts are robbed of their necessary quantity. The abdominal organs are oppressed, and incapable of performing their functions, while the other organs are debilitated and disqualified for healthy action; and then those parts previously weakened, will suffer the most. In the first place, the lungs barely take cognizance of the disturbance of the abdominal organs, sustaining but little injury; but their sympathies increase, until their functions become impaired: eventually, they become particularly affected, and reacting upon those very organs, from which they received their diseased impressions, and hurry the patient to the grave.

The patient, in the first place, has added to all the symptoms and sufferings of indigestion, a pain in some part of the chest, generally in the left breast, accompanied by a cough: this increases until a confirmation of the disease is rendered certain, by the exhibition of all the well known symptoms of pulmonary consumption. It is not unusual for the dyspeptic symptoms to abate somewhat, after the formation of disease in the lungs, these take the lead, modifying the diseased action of the other organs.

The only means of preventing this disease, is to direct

attention early to the dyspeptic symptoms, guarding against the violence of the paroxysms, confining the patient to a strict and approved diet, in short, avoiding all things that have a tendency to produce a recurrence of their violence, and also any causes that have a direct tendency to create inflammation of the lungs.

In the treatment, we have to pursue a mode of practice, having reference both to the dyspeptic and consumptive condition of the patient. Though both diseases are blended together, still there are occasionally individual symptoms, belonging to one or the other disease, requiring such remedies as are ordinarily used in diseases of the stomach and lungs.

The particular treatment of common consumptions, will be found directed by the author of this work, and that of dyspepsia, in its proper place: the treatment of this form of the disease involves and combines them both.

**GENERAL CAUSES OF THE DISEASE.**—Consumption is very often hereditary in families; this, it is presumable, is owing to inheriting the same form of the body, or malformation of the chest, which predisposes to this complaint.

This disease is often owing to peculiar occupations in life. Those mechanics who sit much and are constantly leaning forward or pressing on the breast and stomach, as tailors, shoemakers, seamstresses or milliners, &c. often die of consumptions; consumptions likewise frequently prove fatal to singers, and indeed to all who have occasion to make frequent and violent exertions of the lungs.

To neglected colds; some judicious person has said that “colds kill more than the plague.”

To making a sudden transition, without proper precautions, from a hot to a cold climate; to changing apparel imprudently, or to whatever greatly and suddenly lessens the perspiration.

To frequent and excessive debaucheries.

To wet feet; damp beds; night air, or catching cold after the body has been heated.

To injuries done to the lungs by wounds, or by extraneous substances; as pins, needles, fish bones, &c. inadvertently passing into the windpipe; and also, by stone dust or any other foreign matter.

Professor PHYSIC, of Philadelphia, has lately ascertained, that a relaxed state of the pendulum of the palate, where it continues for a great length of time resting upon and irritating the upper part of the throat, is a cause of consumption. He thinks that it produces the complaint by affording a constant irritation to those parts, which eventually results in chronic inflammation of the mucous membrane, extending itself to the lungs, creating a cough, and other derangements, which eventually terminate in destruction of the lungs. His remedy is clipping the pendulum of the palate; he has performed the operation in a number of cases, and afforded permanent restoration of health to the patient.

To violent passions, exertions, or affections of the mind; such as grief, disappointment, anxiety, or close application to the study of abstruse arts or sciences.

To scrophula or kings evil: when this disappears from the surface of the body, it frequently falls on the lungs—the connection between these two diseases is obvious.

To the measles, if this disease in which the lungs are essentially affected be improperly treated, or if the patient is exposed while in a convalescent state, a deep seated affection of the lungs often follows.

To very rapid growth, which necessarily is accompanied with debility and irritability of the system.

Consumption is sometimes owing to abscesses formed in the diaphragm or in the liver, which occasionally penetrate through the dividing muscle that separates the belly from the chest, and exercise a deleterious influence on the lungs; or indeed consumption is often found connected with liver complaints; this, perhaps, may in part, be owing to the nature of glandular affections, which are apt to spread from one part of the system to other parts. We have before mentioned the very frequent existence of tubercular consumption, and that tubercles much resemble glands, if they are not entirely of a similar nature,

To bursting a blood vessel in the lungs by violent straining, or to falls; especially when bleeding from the arm and other proper means are not resorted to in time: also, to inflammation of the lungs or ill treated pleurisy.

To the sudden suppression of some cutaneous disease which has been of long continuance: to the too rapidly healing up of old ulcers, or the stoppage of an habitual bleeding at the nose.

To confined or unwholesome air: when this is impregnated with the fumes of metals or minerals it proves extremely hurtful to the lungs.

We will not admit the disease to be infectious, but quote the cautionary advice of two eminent physicians. Dr. Heberden observes that he has not seen proof enough to say that the breath of a consumptive patient is infectious; and yet he has seen too much appearance of it to be sure that it is not; for he has observed several die of consumptions in whom infection seemed to be the most probable origin of their illness. from their having been the constant companions or bed-fellows of consumptive persons. Viewing the subject in this light, says Doctor Thomas, it would therefore be advisable to avoid being too closely innated with patients in the last stage of pulmonary consumption.

Women are more liable to this disease than men, partly because their mode of dressing affords less protection against the vicissitudes of the weather, but more especially on account of their habits of living, and the greater delicacy of their organization.

This disease may be induced in females either by an excess or deficiency of the menstrual discharge: by the fluor albus or whites, and by other derangements in the functions of the womb or its appendages. Women of delicate habits are not unfrequently affected by this disease in consequence of keeping their children too long at the breast.

The complaint most frequently attacks persons of a slender make, long neck, high shoulders, and flat and narrow breasts; the predisposition to consumption is generally indicated by a fine clear skin, delicate rosy complexion, large veins, a weak voice, and great sensibility.



According to Doctors Withering and Darwin, the most common indication of a consumptive habit is an unusual magnitude of the pupil of the eye.

**PRECAUTIONARY REMARKS.**—Those who have reason to suspect an hereditary predisposition to this disease, may, without acting under the influence of apprehensive fear, which in the first place is even ridiculous, and in the second can do no good, but must do harm, often ward off its attacks and live to a good old age, notwithstanding frequent premonitory threatenings. It will be adviseable for such to avoid those employments that have been described as favorable to the production of the disease; and to engage in some business which requires moderate exercise in the open air; to wear flannel next the skin, and to abstain from all violent exertions.

Excessive indulgence in venereal gratifications will be found particularly injurious, as well as intemperance in the use of intoxicating liquors, and in eating. The pure, but often, especially in winter, severe air of the hill country, will not agree with them so well as the milder and softer air of the vallies; and a removal, if it be practicable, to a warmer climate than that in which they were born, will be found very advantageous. Such persons particularly, ought not to neglect colds; neither would we recommend that they should be housed on every trivial occasion. Long sea voyages will be found useful.

Consumptions, it has already been said, are often consequent to the sudden suppression of some habitual evacuations. Generally, immediate changes in the animal economy are dangerous; and when an eruption is dried up, or an old ulcer healed, moderate bleeding and purging should be resorted to for a period; and frequently it is advisable to insert a seton,\* and keep it running for a length of time. The introduction of a seton is not very painful, neither is its continuance so inconvenient as is generally supposed; we have known them to be used by persons for several years, during which time their intimate acquaintances had no suspicion of the fact.

\* See the article *seton*, in the appendix.

It has been stated that this disease often proves fatal to all who have occasion to make frequent and violent exertions of the lungs.

Cicero, the great Roman orator, found it necessary to retire from the forum for two years, during which, he travelled into Asia, and afterwards returned with renewed vigour to the duties of his profession. Moliere, the celebrated French author and actor, died of a flow of blood from the lungs, immediately after performing, for the fourth time, his *Malade Imaginaire*. Violent exercise in public speaking, singing, and the like, will almost certainly cause in time, a determination of some malady, either to the lungs or head.

**SYMPTOMS.**—It has been intimated, that consumption depends principally either upon tubercles in the lungs, or upon open ulcers, consequent to other causes. It is the opinion of eminent physicians, that the tubercles, with which the lungs are often thickly studded, and which resemble, before separation, very much what is called the measles in hogs and some other animals, are of a scrophulous nature; the resemblance between them and common external scrophulous tumors, is very considerable, except in point of size; and indeed, it is ascertained, that when scrophula leaves the surface of the body, it often falls on some of the internal parts.

The tubercular form of consumption is indeed by far the most frequent, and generally begins with a short dry cough, by which a disposition to vomit after eating is occasionally excited; this, at length, becomes habitual, but nothing is spit up for some time, except a frothy phlegm, which seems to proceed from the throat; the breathing is somewhat short, and hurried on using bodily exercise; the patient experiences some sense of oppression on the breast; the body becomes gradually lean; and there is dejection of spirits, with langour, variable appetite, sometimes voracious and unnatural, at other times very defective, and there is pain on drawing a deep breath.

This condition of the patient continues frequently for a length of time, and colds are easily taken. The cough becomes gradually more severe, particularly at night; the

expectoration in the morning is copious; the matter thrown up, becomes by degrees, of a darker appearance, and is at times, streaked with blood; the spittle is of a saltish taste; occasionally a quantity of red blood is thrown from the lungs. At length the breathing becomes more difficult, and pain is felt in some part of the chest, generally at first under the breast-bone; the pain after a time settles on one side, most commonly the left.

At the first attack of this disease, the pulse is often natural, or perhaps a little quicker than usual, but it gradually becomes full, hard, and frequent. The face flushes, especially after eating; the palms of the hands and the soles of the feet become hot; breathing is a little laborious, and the fever gradually assumes a hectic form. The hectic fever is symptomatic, and generally attends all extensive accumulations of matter; it has, sometimes, exacerbations twice a day, when this is the case; the first paroxysm occurs usually a little before noon, and a slight remission takes place about four o'clock in the afternoon. This, however, is soon succeeded by another exacerbation, which increases gradually until after midnight; but about two o'clock in the morning, a remission takes place, especially in the advanced stages, which terminates in a profuse sweat. When hectic symptoms begin to appear, the urine becomes high coloured and deposits a sediment. The tongue is often clean, the mouth is moist, and the thirst not very great.

During the exacerbations of fever, a circumscribed redness appears, particularly after the disease has progressed considerably, on each cheek; but during the absence of fever, the face is pale and somewhat dejected. In the advanced stages of hectic fever, the bowels are often very loose, and this looseness frequently alternates with excessive sweats.

In the last stage of the disease, the patient has considerably the appearance of a walking skeleton; the countenance is altered, the eyes look hollow and languid, the nails are of a livid colour and much incurvated, and the feet and ankles swell. The senses generally re-

main entire to the last and the mind is often confident and full of hope.

When consumption is consequent to inflammation of the lungs improperly treated, to the rupture of a blood-vessel, to the measles, to neglected colds, and other similar causes, its progress is usually more rapid than when owing to tubercles, or an hereditary predisposition; and open ulcers are not unfrequently formed in a short time.

This, however, like many other diseases, possesses, in different cases, a great variety of symptoms; into a further examination of which, the limits and nature of this work, will not permit us to enter.

**MODE OF TREATMENT.**—This disease, when once established, proves generally fatal: consequently, eminent medical men have differed much in their modes of treatment.

The cause of its frequent fatality is, that the lungs are necessarily exposed to constant action and to a contact with atmospheric air.

It is believed, that fumes of certain substances, such as rosin or myrrh, thrown on coals, and inhaled through an inverted funnel, have proved useful; these of course are applied directly to the diseased organ.

Dr. Crichton, of St. Petersburg, in Russia, is said to have employed fumigations from tar with great success; his practice was to have the tar placed in an earthen vessel over a small fire or heated iron, until the fumes completely filled the room; this process is to be repeated three or four times a day. This mode of practice, of course, requires a close and separate apartment.

In the treatment of consumptions, every effort should be made to relieve the lungs as much as possible from their heavy duty. It has been mentioned in the sketch given of the animal economy, that the whole amount of blood passing through the human body, has to undergo a double circulation: first through the lungs, and then through the general system. This indicates the propriety of relief by bleeding; sometimes bleedings ought to be copious, but most generally they should not. Frequent and small bleedings are often most useful—perhaps the



amount of an half pint every third day, if a highly excited state of the pulse requires, it will prove the best quantity to be taken. Blisters are useful, and should be employed without reservation where there is not too much arterial action.

When the disease becomes incurable, palliatives only can be used. Opium in small doses is often beneficial; as it tends to relieve pain, and subdue distressing sensations.

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## INFLAMMATION OF THE BRAIN.

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THIS disease is common in warm climates, and generally affects persons in the prime of life. "The passionate, the studious, and those whose nervous systems are irritable in a high degree, are most liable to it."

**CAUSES.**—It is often a consequence of such inflammatory affections as manifest a decided determination to the brain: it may also be occasioned by long want of sleep; especially, when joined with intense study, or by grief, anxiety, intemperate habits, or the stoppage of any accustomed evacuations:—such individuals as imprudently expose themselves to the heat of the sun, by sleeping without doors in a hot season, with their heads uncovered, are often suddenly seized with an inflammation of the brain, and frequently awake quite delirious. External injuries, also, such as blows upon the head, are not unfrequently productive of this disease.

**SYMPTOMS.**—The symptoms which mostly introduce inflammation of the brain; are, pain in the head, and red-

ness of the eyes, with dilated pupils; a violent flushing of the face; disturbed sleep, or a total want of it; great dryness of the skin, and costiveness; sometimes a small dropping of blood from the nose, singing in the ears, and great sensibility of the nervous system.

As the disease advances, the eyes sparkle and are violently agitated; there is a fierceness in the countenance, great restlessness and confusion of ideas; a pain in the eyes on exposure to light, and often frenzy: occasionally, there is a morbid acuteness of hearing; which, however, seldom is of long duration.

The pulse is often weak, irregular, and trembling; but sometimes it is hard, although small. When the brain itself is affected, the pulse is always low; but when the inflammation is confined to the membranes enveloping the brain, it often is hard.

A constant trembling and starting of the tendons—grinding the teeth—white or ash colored stools; stupor, following delirium; suppression of urine and want of sleep are very unfavourable symptoms. When this complaint proceeds from an inflammation of the lungs, of the intestines, or of the throat, it is owing to a translation of the disease from those parts, and often proves fatal.

The symptoms, deemed by writers, most favourable are, a copious discharge of blood from the nose or mouth; a free and general perspiration; a plentiful discharge of urine, which deposits a thick sediment, or a diarrhœa—the delirium being relieved by sleep, the patient remembering his dreams, and the pulse becoming less frequent, but fuller and softer.

Inflammation of the brain is often very rapid in its progress; and requires the most speedy application of remedies. When it is prolonged or improperly treated, it sometimes terminates in madness or a kind of stupidity, which may continue for life.

**MODE OF TREATMENT.**—In the cure of this disease, the first object should be to lessen the quantity of blood in the brain; and afterwards, to prevent an inordinate influx to that part.

To answer the first indication, bleeding, both general and local, are the means chiefly to be used.

At the commencement of the disease, immediate recourse should be had to bleeding; and the quantity drawn ought to be regulated by the strength and age of the patient, and the severity of the symptoms. A large orifice should be made, and if possible, during the operation, the patient should be in a sitting position. Bleeding from the temporal artery,\* or the jugular vein, would probably be productive of more benefit than from any other part; but as both of these operations are somewhat difficult, and in the hands of many would probably be unsafe, especially that of drawing blood from the jugular vein, we should, as a general rule, prefer that the blood be drawn from the arm.

When, however, the patient's pulse and spirits are so low, that general depletion cannot be incurred, leeches, or cups may be applied to the temples: these not only draw off the blood more gradually, but often give more immediate relief.

A spontaneous discharge of blood from the nose, frequently much relieves the patient. When this evacuation happens, it should by no means be stopped, but rather encouraged by applying to the part, cloths wrung out of warm water.

A discharge of blood from the hemorrhoidal veins, (we mean those veins which lose blood in the bleeding piles,) is likewise, often of great service, and ought by all means to be promoted.

If the patient has been subject to the bleeding piles, and the discharge has been stopped, every method must be tried to restore it: as the application of leeches to the parts; sitting over the steam of warm water, or sharp clysters, made of honey, aloes, and salt.

With the view of subduing the inflammatory action, and diverting the flow of blood which is too much directed towards the head, a strong purge may be ordered imme-

\* Bleeding in the *temporal artery* may be effected by inserting a thumb lancet under it, and raising the lancet up so as to divide it: after the operation is finished a compress should be applied, and a bandage wrapped tolerably tight around the head.

diately after the first bleeding; and this ought to be repeated every second or third day, according to the violence of the symptoms. Either the mercurial or saline cathartics may be used; perhaps it may be better to commence with calomel, combined with jalap, in the proportion of fifteen grains of the former, to twenty of the latter; to be followed every second or third day, by some brisk saline purge, as the glauber or Epsom salts. When from any cause, purgatives cannot be administered, laxative clysters should be given—so that the bowels may be kept open throughout the attack.

Immediately after the first bleeding, and the exhibition of the purge, it may be necessary to have the head shaved, and a large blister applied over the scalp. Cloths moistened with vinegar and water, diluted ether, or iced water, should be kept constantly on the forehead and temples, and re-wetted as often as they acquire the temperature of the skin.

If the blister, as is occasionally the case, excites the system, producing a more active state of the pulse, and if it renders the patient more unmanageable; cold, applied to the place, by means of bladders filled with ice or iced water, will be found an excellent remedy; indeed, in some cases where the symptoms are not very violent, cold applications thus made, will often produce the desired result, even without the aid of blisters; though they are, in difficult cases, our chief dependence.

When by the mode of treatment recommended, the pulse has been nearly reduced to its healthy standard, although the skin continues hot and dry, and delirium is still an attendant symptom, the following antimonial powders will be proper: take of tartar emetic three grains; and of powdered nitre or saltpetre three drams; let them be rubbed well together, and equally divided into twelve papers. Of these the patient should take one every second, third, or fourth hour, according to the violence of the symptoms, in some cool beverage, such as toast and water, barley water, &c.

During the cure, it is of the greatest consequence that the patient be kept quiet.—Company, conversation, and



noise of every kind that affects the senses or disturbs the imagination, increases the disease.

Too much light is injurious; for which reason the chamber ought to be a little darkened; light, however, should not be entirely excluded, lest a gloomy melancholy be induced; this is not unfrequently the consequence of the disease, and often terminates in permanent madness.

The patient, so far as is consistent with his safety, should be soothed and humored, for contradiction will irritate his mind and increase his malady.

During the delirium and fever, the food ought to be light, consisting chiefly of simple articles, such as panada, gruel, and a cold infusion of the powdered inner bark of the slippery elm, sharpened occasionally, if it be palatable to the patient, with currant jelly or juice of lemons, or some article of the kind—ripe fruit, roasted or boiled; jellies or preserves may occasionally be given. Cold acidulated liquors should be freely allowed: such as lemonade, tamarind water, barley water, to which a little lemon juice has been added; apple-water, or toast and water. All drinks should be given moderately cold, except during the operation of a purge, and even then they should be only lukewarm.

The room of the patient should be kept cool; and in the summer season freely ventilated, though when the windows or doors are opened the light should be but partially admitted.

## INFLAMMATION OF THE EYES.

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THE causes of this complaint, are, for the most part, exposure to extremes of cold and heat, external injuries from blows and wounds, irritation from the lodgement of foreign bodies under the eyelids or upon the globe of the eye, to the sudden healing of old ulcers, to the suppression of usual evacuations, to looking stedfastly at brilliant objects, or sudden transitions from darkness to any vivid light.

Nothing, remarks Dr. BUCHAN, more certainly occasions an inflammation of the eyes, than night watching, especially reading or writing by candlelight. Drinking spirituous liquors, excess in venereal gratifications, acrid fumes of metals, and of several kinds of fuel, are also pernicious.

This disease is often caused by the matter of the gonorrhœa, or clap, being brought in contact with the eye, through the imprudence of those labouring under that complaint. When inflammation is thus induced, it is often of the most virulent and incurable character, and almost invariably terminates in the loss of one or both eyes. "That it follows," says Professor GIBSON, of Philadelphia, "in many instances, the direct application of gonorrhœal virus, I have the strongest proofs, having had, at different times, patients under my care, in whom the disease was produced by the practice, so common among the vulgar, of washing inflamed eyes with urine. There is reason to believe, also, that the disease is sometimes induced by a metastasis in consequence of a suppressed gonorrhœa."

Inflammations of the eyes are very common among scrophulous children, being often produced, in such constitutions, by imprudently drying up scabbed heads, runnings behind the ears, or any discharges of a similar nature; they are likewise often the result of small-pox or measles, and may even be the consequence of disorder of the digestive organs.

**SYMPTOMS.**—Inflammation of the eyes, as it usually occurs, is characterised by the following symptoms.—A sense of uneasiness or itching, and intolerance of light, diffused redness over the white of the eye, attended by pain, heat, and swelling of the part, an increased secretion of tears, a severe pain proceeding, apparently, from the lodgement of a particle of sand, or some other extraneous body, but in reality from the vessels of the eye becoming enlarged. The pulse is generally quick and hard, with some degree of fever.

Inflammations of this description, particularly when arising from mechanical injury, are, by proper treatment, for the most part, easily subdued; but when they have been neglected or improperly treated in the beginning, are apt to assume a most violent character, are of long continuance, and finally terminate in specks upon the eyes, dimness of sight, and sometimes in total blindness.

**MODE OF TREATMENT.**—In the first stage of the complaint, bleeding is indispensably necessary: the quantity of blood to be drawn, will of course, depend upon the severity of the symptoms, and the strength of the patient.

Where general blood-letting has failed of affording relief, topical depletion will be found useful. This may be effected best, by the application of leeches underneath the lower eyelid: where leeches cannot be obtained, blood may be drawn from the temples by cupping; scarifying, with a sharp lancet, the inflamed vessels of the eye, often proves serviceable. This should be done with a steady hand, and though by the operation, very little blood is drawn, still great relief is afforded to the patient.

After thus resorting to general and local bleedings,

which are to be repeated as often as the severity of the symptoms demand, our next object is freely to evacuate the intestines; and this may be effected either by the mercurial or saline purges; and during the continuance of the disease, it will be necessary to keep the bowels opened, by the exhibition of some mild cathartic every second day.\*

Dr. THOMAS remarks, that, where the complaint has arisen from exposure to cold, or other causes suppressing the perspiration, it is probable that the patient may receive benefit from small doses of some antimonial preparation, given so as to excite sweating.

The celebrated oculists, Mr. SAUNDERS and Sir WILLIAM ADAMS, were in the habit of prescribing a solution of tartar emetic, to be used internally, with very great success, in the early stages of acute inflammations of the eye, with a view to produce either nausea or full vomiting.

Where the treatment suggested, has failed of success, blisters may be applied either behind the ears, or on the back of the neck, and these should be kept running for some time, by applying stimulating dressings, such as the savin ointment, &c.; (*see Dispensatory.*) This, by a continuance of the counter-irritation, will probably lessen the existing inflammation.

In those cases which are constitutional, or which from long continuance have become habitually confirmed, setons in the back of the neck, or caustic issues between the shoulder blades, will be advisable.

To abate local inflammation and irritation, it has long been the practice to make cold astringent applications to the inflamed organ. Pieces of linen cloth, wrung out of a solution of white vitriol, and sugar of lead, of each, eight grains, dissolved in six ounces of pure water, frequently applied to the eye, will be found in many cases, useful: or a solution of half a dram of alum to six ounces pure water, may be tried.

Where the pain is very acute, thirty or forty drops of

\* In diseases of the eyes, the celebrated Dr. Hamilton, of England, with many other eminent physicians, among whom Professors Rush and Physick, of Philadelphia, may be enumerated, recommend purging very strongly.



laudanum, may be added to either of the above applications. If it continues very severe, the internal use of opium may be requisite, a half a grain of which may be given to an adult every six or eight hours; or ten or fifteen drops of laudanum, may be taken at similar intervals.

In this species of inflammation, the eyelids during sleep are liable to be glued together by a thick tenacious substance, which is secreted from the glands of the part. This inconvenience may in some degree, be prevented by anointing cautiously, the edges of the lids, morning and evening, with a mixture of a dram of the white vitriol and an ounce of fresh lard.

Gonorrhœal inflammation of the eye, or that species which occurs in patients labouring under a clap, from their imprudently bringing a portion of the matter in contact with the eye, unfortunately, seldom admits of relief. "At least," says professor GIBSON, "in several instances of this kind, which have fallen under my care, and in others which have occurred in the practice of Dr. PHYSICK, no benefit whatever has resulted from any mode of treatment that could be devised."

We have already remarked that scrophulous patients are very liable to this complaint, and as the treatment, when the disease occurs in such persons, is somewhat peculiar, we will say a few words upon the subject.

Contrary to the mode of treatment proposed in the usual form of the complaint, a tonic plan will here be generally indicated.

In the commencement of this form of the disease, however, it may be necessary to purge the patient, to regulate strictly his diet, to order warm clothing and moderate exercise in the open air, &c. To alleviate the intolerance of light, which is so much complained of by all patients in this disease, a blister on the back of the neck, kept open by strong basilicon ointment, will be found the best remedy. Sometimes the internal use of mercury will be required.

As a local remedy, a watery infusion of opium, is one of the best applications we can employ. Weak solutions.

of white vitriol or alum, also may be used in this form of the complaint.

After the inflammation has been subdued, we should endeavour to prevent a recurrence of the complaint; and with this view, issues or setons should be kept in the back of the neck, for some time after the symptoms have subsided. Where, however, it is dependant on, or connected with a debilitated habit, or some previously existing disease, it will be often necessary to strengthen the general system, before any benefit can result from local remedies. In such cases, the Peruvian bark, and other bitter vegetable tonics, have, in the beginning of the complaint, proved useful.

The diet, except in debilitated and scrophulous patients, should be very low; and every thing of a heating or stimulating nature strictly avoided. The food should consist chiefly of mild vegetables, weak broths, and gruels. The drink may be barley water, balm tea, common whey, and the like. The chamber must be darkened, or the eyes of the patient shrouded by a cover, so as to exclude the light, but not to press upon the eyes. He should be kept quiet, avoiding all violent efforts either of mind or body, and sleep should be encouraged as much as possible.

## QUINSEY;

## OR, INFLAMMATORY SORE THROAT.

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THIS complaint is not confined to any particular part of the throat, but frequently extends throughout the whole lining membrane, greatly affecting the speech and breathing of the patient. It sometimes, however, affects only the tonsils, causing inflammation and enlargement of the glands, with considerable difficulty of swallowing.

**CAUSES.**—In general, it proceeds from the same cause as other inflammatory diseases, such as exposure to cold, sudden vicissitudes of weather, being placed in a partial current of air, wearing damp linen, sitting in wet rooms, quick transitions from heat to cold, or whatever has a tendency to check the perspiration.

It may also be caused by drinking cold liquor when the body is warm, by walking or riding against cold wind, or by any thing that greatly cools the throat and the adjacent parts.

Speaking, singing, or any long exertion of the throat, or acrid or irritating food, may likewise cause an inflammation of that part.

**SYMPTOMS.**—Inflammation of the throat is mostly evident from inspection ;—the parts appear red and swelled: the patient complains of pain in swallowing; the throat is dry; the pulse is quick and hard; and there are evident symptoms of fever; the tongue is often foul.

As the swelling and inflammation increase, the breathing and swallowing become more difficult; and in violent cases, the eyes become inflamed, the ears are painfully affected, and not unfrequently deafness results.

Where the symptoms are very severe, the patient is often obliged to keep himself in an erect posture, for in a recumbent one, there is danger of suffocation. There is a constant inclination to vomit; and where both tonsils are affected, the drink, instead of passing into the stomach, is often returned by the nose: the patient not unfrequently dies merely from an inability to swallow any kind of food.

An external swelling is not an unfavourable sign, but if this suddenly subsides, and the chest becomes affected, the danger is very great.

When a quinsey is the consequence of some other disease which has already weakened the patient, his situation is very critical.

Frothing at the mouth, with a swelled tongue, a pale ghastly countenance, and coldness of the extremities, are fatal symptoms.

**MODE OF TREATMENT.**—As inflammations of the throat are often very dangerous and rapid in their progress, it will be proper in the beginning of the complaint, to bleed from the arm freely; or rather, if possible, from the jugular vein; this operation may be repeated as often as circumstances require.

Where the symptoms are severe, leeches, if they can be procured, may be applied externally to the throat and behind the ears: where, however, this is not practicable, scarifying the inflamed and enlarged tonsils, will afford great relief.

The bowels should be kept constantly open by administering the milder laxatives, and giving the patient for his ordinary drink a decoction of figs, or tamarind water.

A gargle, made of sage tea, with a little vinegar and honey, or one composed of an ounce of powdered borax, dissolved in a half pint of water, and four table spoonsful of vinegar, may be used; these should be administered cold, and frequently repeated during the day.



The throat ought to be rubbed two or three times during every twenty-four hours, with volatile linament, (*see Dispensatory*;) this is often attended with benefit. After these frictions, the neck should be carefully covered with a piece of flannel to prevent the cold from penetrating the skin, as the above applications render it very tender and liable to be acted upon by very slight causes. A bread and milk poultice, in some cases, may also be applied with advantage.

Where the symptoms assume a more inflammatory character, it is necessary that the external remedies be of a more active kind. In such cases, the early application of a blister upon the fore part of the neck, will prove of essential service. After the blistering plaster is removed, the part should be kept running by the application of the savin or strong basilicon ointment, till the inflammation is entirely gone, otherwise upon their drying up, the patient will be in danger of a relapse.

When the patient has been treated as above directed, a suppuration or collection of matter rarely takes place. This is, however, sometimes the case, notwithstanding all our endeavours to prevent it. When the inflammation and swelling continue, and it is evident that a suppuration will ensue, it ought to be promoted by inhaling the steam of warm water, from a tea-pot, or inverted funnel. Soft poultices, also, ought to be applied, and the patient should keep a small portion of roasted apple, or the like, constantly in his mouth.

It sometimes happens that the swelling is so great as literally to prevent any thing from getting into the stomach. In this case, the patient must inevitably perish, unless he can be supported by nourishing clysters; such as chicken broth, gruel, &c. Persons have often been supported by these for several days, 'till the tumors have broken; and afterwards, they have recovered.

Those who are subject to inflammations of the throat, in order to avoid such complaints, should live temperately. They ought, likewise, to beware of catching cold; and should abstain from aliment and medicines of an astringent or stimulating nature.

Violent exercise, by increasing the motion and force

of the blood, is apt to occasion an inflammation of the throat; especially if cold liquor be drank immediately after it, or if the body is suffered, from any cause, suddenly to cool. Those who desire, therefore, to escape this disease, ought, after drinking warm liquors, running, singing, or speaking loud, to take care that they become cool gradually; and upon exposure to cold, to wrap some additional covering about their necks. I have often, (remarks Dr. Buchan,) known persons who had been subject to sore throat, entirely freed from that complaint by only wearing a ribband, or bit of flannel, constantly round their necks, or by wearing thicker shoes, a flannel waistcoat, or the like.

These articles may seem trifling, but they often have a great effect. There is, indeed, danger in leaving them off too suddenly after persons have been accustomed to them; but surely, the inconvenience of using such things for life, is not to be compared with the danger which may attend the neglect of them.

The food in this complaint should be light, and given in small quantities; and drink of a weak diluting kind may be freely allowed—to render it more agreeable, acids may be added.

It is indispensably necessary that the patient be kept easy and quiet; violent affections of the mind, or exertions of the body, may prove fatal. He should not attempt to speak, except in a low voice; when he is in bed, the head ought to be raised a little higher than usual, and a degree of warmth excited, sufficient constantly to promote a gentle sweat.

The neck, particularly, should be kept warm; and for this purpose, several folds of flannel may be wrapt round it; this alone, if applied in due time, will often of itself remove slight complaints of the throat.

## OF THE ULCEROUS SORE THROAT.

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This disease is frequently to be met with: children, however, are more liable to it than adults—females than males, and the delicate than those who are hardy and robust. It prevails chiefly in autumn, and is most frequent after a long course of damp or sultry weather.

**CAUSES.**—This is generally esteemed a contagious distemper, and is supposed mostly to be communicated by infection. Whole families, and even entire villages, it is believed, often receive the complaint from one person. This ought to put people on their guard against the disorder; as they often endanger their own lives, and those of their friends and connexions. In our opinions on this subject, we are guided by the advice of the most eminent medical writers. Whatever tends to produce malignant fevers, may occasion the putrid sore throat; as unwholesome air, damaged provisions, neglect of cleanliness, &c.

**SYMPTOMS.**—This disorder begins with alternate fits of shivering and heat. The pulse is quick, but low and unequal, and generally continues so through the whole course of the disease. The patient complains greatly of weakness and oppression of the breast—his spirits are low, and he is apt to faint when in an upright position; he is troubled with a sickness of the stomach, and often with vomiting or purging. The two latter symptoms are most common in children. The eyes

appear red and watery, and the face swells: the urine is at first pale; but, as the disease advances, it turns more of a yellowish colour. The tongue is red, and generally moist, which distinguishes this from a decidedly inflammatory disease. Upon looking into the throat, it appears swelled, and of a red colour. Pale or ash-colored spots, are here and there interspersed, and sometimes one broad patch or spot, of an irregular figure, and pale white color, surrounded by redness, only appears. These whitish spots or sloughs cover small ulcers.

An eruption upon the neck, arms, breast, and fingers, about the second or third day, is a common symptom of this disease—when it appears, the purging and vomiting generally cease.

There is often a slight degree of delirium; the face frequently appears bloated, and the inside of the nostrils red and inflamed. The patient complains of a disagreeable putrid smell, and his breath is very offensive.

The putrid sore throat may be distinguished from the inflammatory, by the vomiting and looseness with which it is generally ushered in; by foul ulcers in the throat, covered with a white or livid coat; and by the excessive weakness of the patient; with other symptoms of a low form of fever.

Unfavourable symptoms are, an obstinate purging, extreme weakness, dimness of the sight, and frequent shiverings, with a weak, fluttering pulse. If the eruption upon the skin suddenly disappears, or becomes of a livid color, with a discharge of blood from the nose or mouth, the danger is very great.

If a gentle sweat breaks out about the third or fourth day, with a slow, firm and equal pulse; if the sloughs are thrown from the ulcers in a kindly manner, leaving a clean and florid appearance; if the breathing is soft and free, with a lively color of the eyes, there is reason to hope for a salutary termination.

**MODE OF TREATMENT.**—The medicines for the ulcerous sore throat are entirely different from those which are proper in the inflammatory. All evacuations, such as bleeding, purging, &c. must be avoided. Cooling medi-



cines, as nitre and cream of tartar, are likewise hurtful. Strengthening cordials alone can be used with safety—and these ought never to be neglected.

If at the beginning there is much sickness or inclination to vomit, the patient must drink an infusion of common tea or camomile flowers, in order to cleanse the stomach. If these are not sufficient, he may take twenty or thirty grains of ipecacuanha, or any other gentle vomit.

If the disease is mild, the throat may be gargled with an infusion of sage and rose leaves, to a gill of which, may be added a spoonful or two of honey, and as much vinegar as will make it agreeably acid; but when the symptoms are urgent, the sloughs large and thick, and the breath very offensive, the following gargle may be used: take of Cayenne pepper, two table spoonsful; of salt, a tea spoonful, and infuse them in half a pint of boiling water, to which may be added the same quantity of warm vinegar. After standing for about an hour, the liquor should be strained through a fine cloth, and one or two table spoonsful given every half hour.

Where the symptoms are severe, and the complaint is attended with danger, it will be advisable to give the Peruvian bark in doses of a teaspoonful every one or two hours; and if the inflammatory symptoms do not run too high, it may be mixed with a little port wine.

Where the powder cannot be retained upon the stomach, a strong decoction or infusion of it, with the addition of the Virginia snake root may be substituted. If any diarrhœa is produced by the use of the bark, it will be necessary to add a few drops of laudanum to each dose.

Where the patients are very young, and it is impossible to prevail upon them to take the bark in any form, clysters should be administered:—two drams of the fine powder, suspended in a tea cupful of barley water, should be given to an infant every three or four hours. To those who are older, a proportionate quantity may be administered. When the injections are not retained, a few drops of laudanum may be added.

Blisters have been highly recommended in this disease.

especially when the patient's pulse and spirits are low. If used, they ought to be applied to the throat, behind the ears, or upon the back of the neck; but, as they are sometimes attended with danger, in very low forms of the disease, by inducing ulceration, and sometimes mortification of the part to which they are applied, we would prefer rubbing the throat with something stimulating; such as the spirits of turpentine, or applying a plaster of mustard, moistened with the spirits of camphor; this will often be attended with benefit, by exciting a slight degree of external inflammation.

When the skin is very dry, and any great degree of fever is present, small doses of ipecacuanha may be frequently given, with a view to determine the circulation to the surface, and thus produce sweating, or at least a moisture on the skin. To assist in promoting a perspiration, bathing the feet in warm water will be found serviceable, though where the patient is low, this is apt to prove too debilitating; it seems, therefore, advisable to resort to this plan, only where the eruption on the skin becomes very pale, or suddenly recedes.

Should the vomiting prove troublesome, it will be proper to give the patient, as occasion requires, the effervescing draught, (*see dispensatory*,) and apply to the pit of the stomach the spice plaster made of ground pepper, cinnamon, and cloves, of each two table spoonsful, combined with a sufficiency of honey or molasses to prevent it from crumbling. This will often succeed in calming irritability of the stomach, when internal means have failed. Tea, made of mint, and a little cinnamon, will be proper as an ordinary drink, especially if a quantity of good wine, proportioned to the violence of the fever and the degree of debility that exists, can be added.

When diarrhœa occurs, laudanum should be given in such quantities as the age of the patient demands; this may be administered in a little cinnamon water as often as is necessary.

A suppression of urine, or great pain and difficulty of passing it, is sometimes the consequence of great debility in this disease. In such cases, it is necessary to rouse

the system by the most active measures. Emollient applications should also be made to the region of the bladder, and mild anodyne clysters given several times a day.

Where, in the last stage of this complaint, bleeding from the nose, mouth, or ears is present, they should be immediately stopped.

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## OF COLDS.

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It has been observed, that where a man is determined to write a book, it shews more wisdom to send forth into the world that which another has done well, than to offer perhaps inferior ideas of his own. Therefore, in relation to this, as well as many other subjects, we again acknowledge ourselves indebted to Dr. BUCHAN. Indeed it has been premised, that on many occasions we use his own words, without attributing them to him; not doubting but that, were he alive at this day, he would sanction our conduct: we feel at the same time, a degree of indignation against those plagiarists who have borrowed or stolen from this distinguished physician, without due acknowledgement.

It has been observed, that colds are the effect of an obstructed perspiration; the common causes of which we have likewise endeavoured to point out, and shall not here repeat. Neither will we spend time in enumerating all the various symptoms of colds, as they are pretty generally known. It may not, however, be amiss to observe, that almost every cold is a kind of fever, which only differs in degree from some of those, that have already been considered.

No age, sex, or constitution, is exempted from this disease; neither is it in the power of any medicine or regimen to prevent it. The inhabitants of every climate are liable to catch cold, nor can even the greatest circumspection defend them at all times from its attacks. Indeed, if the human body could be kept constantly in a uniform degree of warmth, such a thing as catching cold would be impossible; but as that cannot be effected, the perspiration must be liable to many changes. Such changes, however, when trifling, do not affect the health; but when great, must prove hurtful.

When oppression at the breast, an accumulation of mucus in the nose, unusual weariness, pain in the head, &c. give reason to believe that the perspiration is obstructed, or, in other words, that the person has caught cold, he ought immediately to lessen his diet, at least the usual quantity of his solid food; and abstain from all strong liquors. Instead of flesh, fish, eggs, milk, and other nourishing diet, he may eat light bread pudding, veal or chicken broth, panado, gruels, and the like. His drink may be water gruel, sweetened with a little honey; or an infusion of balm or flaxseed tea, sharpened with some acid: a decoction of barley and liquorice, with tamarinds, is useful, or any other cool, diluting, acid liquor.

Above all, the supper should be light; water-gruel, sweetened with honey, with a little toasted bread in it, is proper. If honey should disagree with the stomach, the gruel may be sweetened with molasses or sugar, and acidulated with the jelly of currants. Those who have been accustomed to generous liquors, may take wine-  
whew instead of gruel, which may be sweetened as above directed.

The patient ought to lie longer than usual in bed to encourage a gentle sweat, which is easily brought on towards morning, by drinking tea, or any kind of warm diluting liquor. We have often known this practice carry off a cold in one day, which, in all probability, had it been neglected, would have cost the patient his life, or have confined him for months. Would people sacrifice a little time to ease and warmth, and practice a moderate degree of abstinence when the first symptoms of a



cold appear, we have reason to believe that most of the bad effects which flow from an obstructed perspiration, might be prevented. But, after the disease has gathered strength by delay, all attempts to remove it often prove vain. A pleurisy, or a fatal consumption of the lungs, are common effects of colds which have been totally neglected, or treated improperly.

Many attempt to cure a cold by getting drunk. But this to say no worse of it, is a very hazardous experiment. No doubt it may sometimes succeed, by suddenly restoring the perspiration; but when there is any degree of inflammation, which is frequently the case, strong liquors, instead of removing the malady, will increase it. By this means a common cold may be converted into an inflammatory fever.

When those who labour for their daily bread, have the misfortune to catch cold, they often cannot well afford to lose a day or two, in order to keep themselves warm, and take a little medicine; by which means the disorder is often so aggravated as to confine them for a considerable time, or even to render them ever after unable to sustain hard labour. But even such as can afford to take care of themselves, are often too imprudent to do it; they affect to despise colds, and as long as they can crawl about, scorn to be confined by what they call a *common cold*. Hence it is, that colds destroy such numbers of the human race. Like an enemy despised, they gather strength from delay, till at length they become invincible. We often see this verified in travellers, who, rather than lose a day in the prosecution of their business, throw away their lives by pursuing their journey, even in the severest weather, with this disease upon them.

It is certain, however, that colds may be too much indulged. When a person, for every slight cold, shuts himself up in a warm room, and drinks great quantities of warm liquors, it may occasion such a general relaxation as will not be easily removed. It will therefore be proper, when the disease will permit, and the weather is mild, to join to the regimen mentioned above, gentle exercise, such as walking, or riding on horseback. An ob-

stinate cold which no medicine can remove, will often yield to gentle exercise and a mild diet.

Bathing the feet and legs in warm water, has a great tendency to restore the perspiration. But care must be taken that the water be not too warm, otherwise it will do hurt. It should never be much warmer than the blood, and the patient should go immediately to bed after using it. Bathing the feet in warm water, lying in bed, and drinking warm water-gruel, or other weak liquors, will sooner relieve a cold, and restore the perspiration, than all the hot sweating medicines in the world. This is all that is necessary for removing a common cold; and if this course be taken at the beginning, it will seldom fail.

But when the symptoms do not yield to abstinence, warmth, and diluting liquors, there is reason to fear the approach of some other disease, such as an inflammation of the breast, an ardent fever, or the like. If the pulse therefore, be hard and frequent, the skin hot and dry, and the patient complains of a pain in his head or breast, it will be necessary to bleed, and to give some mild purgative. We have often seen this course, when observed at the beginning, remove the complaint in two or three days, when the patient had all the symptoms of an approaching fever, or of an inflammation of the breast.

The best mode of preventing colds, lies in avoiding, as far as possible, all extremes either of heat or cold, and in taking care, when the body is heated, to let it cool gradually.

A cough is generally the effect of a cold, which has either been improperly treated, or entirely neglected.—When this proves obstinate, there is always reason to fear the consequences, as it shews a positive affection of the lungs, and is often the forerunner of a consumption.

If the cough be violent, and the patient young and strong, with a hard quick pulse, bleeding will always be proper; but in weak and relaxed habits, bleeding prolongs the disease. When the patient spits freely, bleeding is unnecessary, and sometimes hurtful, as it tends to lessen that discharge.

When the cough is not attended with any degree of fever, and the spittle is viscid and tough, sharp pectoral

medicines are to be administered, such as gum ammoniac syrup of squills, &c. Two table spoonsful of a strong solution of gum ammoniac may be taken three or four times a day; more or less of the medicine should be administered, according to the age and constitution of the patient.

Squills may be given various ways: two ounces of the vinegar, the oxymel, or the syrup, may be mixed with the same quantity of cinnamon water, to which may be added an ounce of common water. Two table spoonsful of this mixture should be taken three or four times a day.

A syrup made of equal parts of lemon-juice, honey, and sugar candy, is likewise very proper in this kind of cough. A table spoonful of it may be taken at pleasure. Professor BARTON's brown mixture, for which we refer to the Dispensatory, will be found useful.

But when the defluxion is sharp and thin, gentle opiates, oils, and mucilages, are more proper. A cup of an infusion of poppy leaves and slippery elm bark, or the flowers of colts-foot, may be taken frequently: a tea spoonful of paregoric may be put into the patient's drink twice a day.

In obstinate coughs, it will be often necessary, besides expectorating medicines, to have recourse to issues or setons. In many cases, we have observed the most happy effects from a Burgundy pitch plaster applied between the shoulders. About the bulk of a nutmeg of Burgundy pitch may be spread thin upon a piece of soft leather, of the size of the hand, and laid between the shoulder-blades. It may be taken off and wiped every three or four days, and ought to be renewed once a fortnight or three weeks. This is a cheap and simple medicine, and consequently apt to be despised; but we will venture to affirm, that the whole *materia medica* does not afford an application more efficacious in almost every kind of cough. It has not indeed, always an immediate effect; but, if kept on for some time, it will succeed where other medicines fail.

The only inconveniency attending this plaster, is the itching which it occasions; but surely this may be borne.

considering the advantages which the patient may expect to reap from the application; besides, when the itching becomes very uneasy, the plaster may be taken off, and the part rubbed with a dry cloth, or washed with a little warm milk and water. Some caution indeed is necessary in discontinuing the use of such a plaster; this however, may be safely done, by making it smaller by degrees, and at length quitting it altogether in a warm season.

When coughs proceed from a foulness and debility of the stomach, syrups, oils, mucilages, and all kinds of balsamic medicines, do hurt. The *stomach cough* may be known from one that is owing to a fault in the lungs, by this, that in the latter the patient coughs whenever he inspires, or draws in his breath fully; but in the former, this does not generally happen.

The cure of this species of cough depends chiefly upon cleansing and strengthening the stomach; for which purpose, gentle vomits and bitter purgatives are most proper.

In coughs which proceed from a debility of the stomach, the Peruvian bark is likewise of considerable service. It may either be chewed, taken in powder, or made into a tincture, along with other stomachic bitters.

A *nervous cough* can only be removed by change of air and proper exercise, to which may be added the use of gentle opiates; paregoric elixir, which is only opium disguised—or ten, fifteen, twenty, or twenty-five drops of laudanum, more or less, as circumstances require, may be taken at bed time, or when the cough is most troublesome. Immersing the feet and hands in warm water, will often appease the violence of a nervous cough.

When a cough is only the symptom of some other malady, it is in vain to attempt to remove it without first curing the disease from which it proceeds. Thus, when a cough is occasioned by *teething*, keeping the body open, scarifying the gums, or whatever facilitates the cutting of the teeth, has a tendency to appease the cough. In like manner, when *worms* occasion a cough, such medicines as remove them, will generally cure the cough.

Women, during the last months of pregnancy, are often greatly afflicted with a cough, which is generally relieved



by bleeding, and keeping the body gently open. They ought to avoid all flatulent food, and to wear a loose easy dress.

A cough is not only a symptom, but is often likewise the forerunner of diseases. Thus, the gout is frequently ushered in by a very troublesome cough, which affects the patient for some days before the coming on of the fit. This cough is generally removed by a paroxysm of the gout, which should therefore be promoted, by keeping the extremities warm, drinking warm liquors, and bathing the feet and legs frequently in warm water.



## WHOOPIING COUGH.



This disease seldom affects grown people, but is most common among children; however, very few escape it at some period of life. The complaint prevails at times epidemically, and has been observed most common in the autumnal and winter months. It is generally supposed to be communicated by contagion, although some deny this opinion. Dr. Thomas thinks that there is a cause, independent of this, which exists in the atmosphere. On the causes, perhaps, considering the nature of this work, we have touched sufficiently.

The whooping cough is so well known, that a description of it is unnecessary. Whatever hurts the digestion, obstructs the perspiration, or relaxes the solids, disposes to this disease; consequently its cure must depend upon cleansing and strengthening the stomach, bracing the solids, and at the same time promoting perspiration, and the different secretions.

The diet must be light and of easy digestion; for children, good bread made into pap or pudding, chicken broth, with other light spoon-meats are proper; but those who are farther advanced in life, may be allowed sago-gruel, and if the fever be not high, a little boiled chicken, or other moderate nourishment. The drink may be mint or balm tea sweetened with honey or sugar-candy, or weak wine-whey.

It is not uncommon to find the whooping cough prevailing in one town or village, when another, at a very small distance, is quite free from it. Whatever may be the cause, we are sure of the fact. No time ought therefore to be lost in removing the patient to some distance from the place where the disease was caught; and, if possible, into a more pure and warm air.

When this disease proves violent, and the patient is in danger of being suffocated by the cough, bleeding should be resorted to, especially if there be a fever with a hard full pulse. But as the chief intention in bleeding is to prevent an inflammation of the lungs, and to render it more safe to give vomits, it will seldom be necessary to repeat the operation; yet if there are symptoms of an inflammation of the lungs, a second or even a third bleeding may be requisite.

It is generally reckoned a favourable symptom when a fit of coughing makes the patient vomit. This cleanses the stomach, and greatly relieves the cough. It will therefore be proper to promote this discharge by small doses of ipecacuanha.

It is very difficult to make children drink after a vomit. We have often seen them happily deceived by infusing a scruple or half a dram of the powder of ipecacuanha in a teapot, with half a pint of boiling water. If this is disguised with a few drops of milk and a little sugar, they will imagine it tea, and often drink it greedily. A small tea cupful may be given every quarter of an hour, or rather every ten minutes, till it operates.

When the child pukes effectually there will be no occasion for drinking any more, as the water already on the stomach, will be sufficient.

Vomits not only cleanse the stomach, which in this

disease is generally loaded with phlegm, but they likewise promote the perspiration and other secretions, and ought therefore to be repeated according to the obstinacy of the disease. They should not, however, be strong; gentle vomits, frequently repeated, are both less dangerous, and more beneficial than powerful ones.

The body ought to be kept gently open. The best medicines for this purpose is the compound tincture of rhubarb. Of this a tea spoonful or two may be given to a child twice or thrice a day, as there is occasion. To such as are farther advanced, the dose must be proportionably increased, and repeated 'till it has the desired effect. Most children are fond of syrups and jellies, and seldom refuse even a disagreeable medicine when mixed with them.

Opiates are sometimes necessary to allay the cough. For this purpose a little of the syrup of poppies, or five, six, or seven drops of laudanum, according to the age of the patient, may be taken in a little penny-royal tea, and repeated occasionally.

The garlic ointment is a well known remedy in Britain for the whooping cough. It is made by beating in a mortar, or some similar vessel, garlic, with an equal quantity of hog's lard. With this the soles of the feet may be rubbed twice or thrice a day; but the best method is to spread it upon a rag, and apply it in the form of a plaster. It should be renewed every night and morning at least, as the garlic soon loses its virtue. This is an exceeding good medicine both in this and most other coughs of an obstinate nature. It ought not, however, to be used when the patient is very hot or feverish, lest it should increase these symptoms.

The feet should be bathed once every two or three days in lukewarm water; and a Burgundy-pitch plaster kept constantly on the back. But when the disease proves violent, it will be necessary, instead of it, to apply a blistering plaster, and to keep the part open for some time with basilicon ointment.

When the disease is prolonged, and the patient is free from a fever, the Peruvian bark, and other bitters, are the most proper medicines. The bark may either be

taken in substance, or in a decoction or infusion, as is most agreeable. For a child, ten, fifteen, or twenty grains, according to the age, may be given three or four times a day. For an adult, half a dram or two scruples will be proper. It is safe to give a few grains of castor along with the bark. A child of six or seven years of age may take seven or eight grains of castor, with fifteen grains of powdered bark, for a dose. This may be made into a mixture with two or three ounces of any simple fluid, and a little syrup, and taken three or four times a day.

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## OF THE INFLUENZA.

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IN our description of this disease, we are principally indebted to an article written some years since by the respectable and experienced Dr. WILLIAM CURRIE, of Philadelphia. Some small alterations are made in his language and opinions. None of his observations will be marked as quoted. The proper mode of medical treatment, which gradually advances towards some degree of perfection as diseases become more perfectly understood, authorizes us occasionally to advance (if the expression be admissible) a step before our medical fathers.

Dr. CURRIE has slightly intimated, but we more explicitly state, that the influenza is often followed by some other disease. We have known it to cause the bursting of a blood vessel in the lungs, and occasionally some inflammatory complaint of that organ; remitting inflammatory fevers not uncommonly come on in a short time after the disease, which is evidently epidemical—



we think, communicated by some unknown cause through the medium of the atmosphere; but we believe it is not directly contagious or infectious.

There is an essential difference between the influenza and a common cold, and there is much more immediate danger from the former than from the latter. The disease when prevalent, appears to spare but few individuals, but affects, without any accountable cause, some much more severely than others.

This disease does not occur in this country every year, or at regular periods, but at very irregular and uncertain intervals; and, although it occurs at different seasons, and under very different states of the air, it is not improbable that the sensible qualities of the atmosphere have a share in its origin or generation, and much share in its propagation.

It appears from a collection of historical facts, published in the third volume of the London Medical Transactions, that the influenza occurred and spread over a great portion of the world in the years 1510, 1557, 1580, 1587, 1591, 1657, 1709, 1733, 1743, 1762, 1775, and 1782.

It appears from Webster's History of Epidemics, that the influenza was prevalent in America so early as the year 1647, and that it was again epidemic in New-England, in the year 1655, and that in the year last mentioned, it began in the month of June.

Dr. Gilchrist, in his observations on the influenza, published in the third volume of the Physical and Literary Essays of Edinburgh, states, that it was prevalent at Edinburgh in the year 1729, and that it began in the winter. He says this disease increased the bills of mortality at London, for some time, to about one thousand a week.—“The weather at this period, was thick, warm and rainy.”

It again made its appearance at Edinburgh about the 17th of December, 1732, and continued to spread there till January, from which time it rapidly decreased, and ceased entirely at the end of the month. “It had been previously epidemic in Saxony and Hanover, and other neighbouring countries, in Germany, in the month of November.”

“It appeared in London and Flanders, after the first week of January, 1733—in Paris, about the middle, and in Ireland, about the end of January—at Leghorn, about the middle of February, and at Naples and Madrid, near the end of the same month.”

“It made its appearance in America about the middle of October, 1733, and was first observed in New England. It was soon after observed in Barbadoes and Jamaica, and was also reported to have made its appearance in Peru and Mexico, in South America.”

Dr. Ratty, in his account of the weather and diseases of Dublin, relates that the influenza of 1732-3 appeared in Dublin towards the latter end of winter. That which occurred in 1737, made its appearance in October, and that in 1743, in May; in the year last mentioned it was observed first at Rome, where it carried off great multitudes, as it did afterwards in Spain. It had been epidemic in London a month before it was observed in Dublin. The prevalence of this disease, and its having spread over the chief part of Europe in the vernal season of 1743, is mentioned by Dr. Huxham, in his *Observations on the Air and Diseases of Plymouth*. Dr. Whytt, in a letter to Dr. Pringle, mentions the prevalence of the influenza in Edinburgh, and in the south of Scotland in the year 1758.

There are no records of the occurrence of this disease in America, that I have met with, from 1733 until the year 1749, and I only have the account of its being epidemic or general, at that time, from tradition, having seen no printed record of it; nor is there any recollection, by the ancient inhabitants of Philadelphia, of its occurrence, from the period last mentioned, until the year 1761; at which time, according to the report of the late Dr. Thomas Bond, of Philadelphia, it was traced from the West India islands to Halifax, where it made its appearance in the spring, and from thence was conveyed to Massachusetts and the neighbouring states, and afterwards spread in a rapid manner over all the inhabited parts of North America, without being retarded, in its progress, by any changes in the sensible qualities of the atmosphere, or in the course of the winds, until the month

of July; from which time, it was heard no more of in this country, till the year 1789; at least I have not been able to obtain any documents of its existence within those periods.

Dr. Gilchrist observes, that in the year 1762, the influenza spread regularly in England from south to north, and in Scotland was most general in the month of June, though spasmodic cases have been observed as early as April.

Dr. Munro, in his Account of the Diseases in the British Hospitals in Germany, relates, "that at Bremen, after a very severe winter, the weather, from being very cold, became of a sudden, extremely hot about the 10th of April, 1762, and that in a few days after, many persons were seized with a very violent catarrhal disorder, accompanied with pains in the breast, head, limbs, and all over the body; and that a similar disorder was epidemical in most countries of Europe, at the same time."

In the year 1789 it made its appearance in New York, early in September, and in Philadelphia, the latter end of the same month; to the latter place, it was supposed to have been brought by some of the society of Friends, who came to attend their yearly meeting; soon after which it spread over all the southern states, and to the army in the Western Territory, under the command of General Wayne. According to the reports of the public prints, the disease did not reach Boston for some time after it had become very general in New York. Its first appearance in Jamaica the year last mentioned, was about the 20th of October, near a month after its appearance in Philadelphia, and according to the testimony of Drs. Chisholm and Read, it did not appear at Grenada until November, and at St. Lucia till towards the close of December.

The disease again made its appearance in Philadelphia in the early part of the summer of 1793, but had nearly subsided, when the yellow fever made its appearance the latter end of July and beginning of August. It did not spread very generally that year.

Towards the end of 1802, this disease appeared in different parts of Europe in succession. In Paris it was

epidemic or very general some weeks before it made its appearance in London. It soon after proceeded to different parts of Scotland.

The influenza became epidemic in the United States again in the year 1807. It made its appearance this time, as it had done in the year 1789, at first in New York, and existed there in 1808, two weeks at least before it was noticed in any other part of the United States.

It had made very little progress in Philadelphia on the 11th of August, at which time it appears, from Dr. Ricketson's account, published in one of the New York newspapers, that more than one half of the inhabitants of that city were then, or had been lately affected by it.

It has been reported that it was epidemic at Halifax before it made its appearance in New York; the truth of this report we have not been able to ascertain with certainty. But the bills of inquiry taken, prove that it was epidemic at the Cape de Verd islands, which are situated near the coast of Africa, and belong to the Portuguese, several weeks before it made its appearance in this country.

It appeared in Princeton, New-Jersey, about fifty-eight miles south-west from New York, and on the post road to Philadelphia, about the same time that it appeared at Philadelphia, though but few cases occurred at Princeton till the 20th of the same month.

According to Dr. Spalding's account, annexed to his bill of mortality for Portsmouth, New-Hampshire; it did not make its appearance in that city till about the middle of August, and did not disappear till the middle of December, which is the season when common catarrhs are most prevalent.

Dr. Kollock, of Savanna, in a letter dated March 7th, 1808, informs, that it was not observed in that place till about the 26th of October; and adds, that "though none died of it in that town, many died of it in the interior parts of the state, where in some instances it swept off whole families."

According to Dr. Ramsay's account of the influenza in his History of South Carolina, one half of the inhabi-



rants of Charleston, amounting to about fourteen thousand persons, were attacked by the influenza in the autumn of 1807, of whom forty-five, including thirty-two negroes, died. He asserts that it originated in New York, and spread in all directions. It reached Canada in October, and extended to the western and southern states, and even to Havana, in the course of three months." Its rise and progress is ascribed by Dr. Ramsay, to some morbid constitution of the air. He also entertains the same opinion relative to the origin of "the yellow fever, though the one spreads rapidly over every inhabited part of the country, while the other is chiefly confined to the limits of a city or sea-port town.

Several eminent physicians are of opinion, that the influenza is propagated over large portions of the globe by certain noxious particles contained in the air. The numbers attacked by this disorder at the same time, and the extensive sphere of its activity, are circumstances which seem to favour this opinion.

A long continuance of warm, calm, and misty weather preceded the appearance of the influenza in Philadelphia, in the year 1789; whereas, the season previous to, and during its prevalence in 1807, was much more rainy and cooler than it had been known at the same season of the year for a long time.

**SYMPTOMS.**—In general, symptoms of a common cold precede the disease.

Many complain of a sensation of soreness in the breast, and pain on coughing, especially in the forehead or in the eye balls. In these cases the pulse is always frequent, and generally hard or tense, and the skin dry, except during the act of coughing. The eyes are also frequently red and inflamed, as well as watery and painful; and frequently the disease appears to be confined to the eyes only, to the exclusion of other symptoms. In some cases the pains of the loins and limbs are extremely acute, accompanied with great lassitude, or a feeling, resembling very great fatigue from too much exertion.

When the local affection is accompanied with acute.

pain or stitches in the breast or side, and the cough is distressing and almost incessant, and the expectorated matter scanty, white and tough, bleeding is essential.

When the inflammation is more superficial and mild, the expectoration more copious and free, and the cough less frequent and distressing, it is not so necessary to use bleeding.

In affections of mucous membranes, a superficial inflammation occasions a copious secretion of mucous, whereas when the inflammation affects deeper seated vessels, no mucous is secreted till that high state of inflammation subsides, or is considerably diminished. The same effect is observable in every other secreting surface.

With old people the disease often commences with symptoms of lethargy and prostration of strength, which no remedies can relieve.

In pregnant women, the disease often resembles the pleurisy, and is relieved by the same remedies as are most efficacious in that disease.

Persons exposed in thin clothing, to sudden changes of temperature, which occur during the prevalence of the disease, and particularly immediately after their recovery from the influenza, are often attacked with a renewal of catarrh, and some under similar circumstances are attacked with the dysentery, by which they suffer very severely.

All old strains and chronic diseases are aggravated by it, and many fall victims to consumption, this disease often causing an attack of that relentless foe to life.

In general, children are affected much more mildly by it than adults, and women than men, those in a state of pregnancy excepted.

**MODE OF TREATMENT.**—This disease, as has been mentioned, (and repetitions are unavoidable in a work of this description,) requires blood-letting, and other depleting remedies, with more or less strictness and attention, in proportion to the greater or lesser degree of violence in the existing inflammation and fever.

Small and repeated doses of nitre and tartar emetic or antimonial wine, may be usefully employed.

As soon as the pain and fever are subdued, a few drops of laudanum may be taken three or four times a day, or a pill containing one sixth or one fourth of a grain of opium, and one grain or one and a half of ipecacuanha, or one fourth of a grain of emetic tartar, at the same stated periods, followed by a decoction of barley, liquorice, and white sugar, or any other agreeable mucilaginous tea or infusion; such as that which may be made of the slippery elm bark, observing to increase the quantity of the opiate at bed time, and to favour mild perspiration, by occasionally bathing the feet in warm water.

Many indeed have the disease so mildly, that they have no occasion for any remedy, but pursue their usual occupations without much inconvenience.

Sometimes in the latter periods of this complaint, where much debility has been induced, it becomes necessary to use tonics, and even stimulants; but stimulants should be resorted to with caution.

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## OF THE CROUP, OR HIVES.

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THIS disease is dependent on a peculiar inflammatory action of the lining membrane of the throat and windpipe, from which is poured out a thick tenacious substance, that affects, in a greater or less degree the passage, and often gives rise to this complaint.

Croup is peculiar to children, especially from the first to the tenth year of their age; particularly those who are hearty and robust. Adults have very rarely been known to suffer from the complaint.

**CAUSES.**—Exposure to cold appears to be the most general cause of this disorder; hence it occurs in the winter and spring more frequently than in other seasons. It is supposed also to be more prevalent near the sea coast, where the air is loaded with moisture, and where the changes of weather are sudden and more sensibly experienced than in more inland situations; though in rich, and particularly in marshy districts, it is frequently met with.

**SYMPTOMS.**—This complaint, for a day or two before its attack, is preceded by fretfulness, lassitude, and drowsiness; the eyes are somewhat suffused and heavy, and there is a cough, which from the beginning, has often a very peculiar shrill sound: this, in the course of two or three days, or perhaps in a few hours, becomes more violent, almost incessantly troublesome, and likewise more shrill.

Every fit of coughing agitates the child extremely; a general tremor occurs, the face becomes flushed and swelled, the eyes are protuberant, and there is a kind of convulsive endeavour at the close of each fit to renew the breathing, which the violence of the disease almost impedes; this difficulty often so increases with the advance of the disease, that the patient frequently throws his head backwards in the agony of attempting to escape suffocation.

Not only is the cough accompanied by an unusual sound, but the breathing also is attended by a peculiar hissing, as though the wind-pipe was in part closed up, which, indeed, is mostly the case; together with these symptoms, the thirst is extreme, there is an unpleasant sense of heat over the whole body, and a desire to change from place to place.

As the disease advances, the child becomes very restless, the breathing is more interrupted and laborious, with a rattling in the throat. The nostrils now expand and contract, the shoulders are elevated at every inspiration, and the cheeks are distended with every expiration; these symptoms are accompanied by great anxiety and sense of suffocation. After some time the pulse be-



comes very feeble, and the extremities cold and livid. Where the disease has advanced thus far, the patient soon becomes exhausted and dies.

The croup may be justly considered a very dangerous disease, often terminating the life of the patient in a short time by suffocation, which is induced, either by spasms, or by matter blocking up the air vessels which go to the lungs. When, on the contrary, it terminates in neither, it is owing to a subsidence of the inflammation, which is attended by a cessation of the spasms, by relief of the difficulty of breathing, by the voice becoming natural, and by a free and copious expectoration.

**MODE OF TREATMENT.**—As the croup, or hives, is dependent upon an inflamed state of the mucous membrane, the throat and wind-pipe, it will be necessary, first to lessen the increased action which exists in the part, and with this view, bleeding, both general and topical, emetics, purging and blistering, will all be brought into requisition.

The first thing to be done, is to detract a quantity of blood from the arm, proportioned to the age of the patient. Where the respiration is very difficult, the operation should be continued until fainting has been nearly induced. The warm bath is also very useful.

If, by this course, the symptoms are not mitigated, or though mitigated, in a short time should return, more blood ought to be drawn from the general system, and leeches, if they can be procured, should be applied immediately to the throat. The prompt abstraction of blood in this complaint, and the use of emetics, are the principal remedies from which relief may be expected.

Immediately after blood is drawn, emetics ought to be resorted to, until free vomiting is produced. Antimonial wine or ipecacuanha, in quantities suitable to the age of the patient, ought to be the medicines on which, to produce puking, our chief dependence should be placed.

Where these articles act in a tardy or ineffectual manner, the patient ought to be placed in a warm bath, of between ninety and one hundred degrees of Fahrenheit's thermometer; which, by relaxing spasms, will much

facilitate an operation, by which great relief is often afforded, in consequence of the discharge of a considerable quantity of ropy mucus.

After the patient has been bled and puked, it will be proper to apply a large blister on the throat, from ear to ear; and after it is removed to keep up a discharging surface by stimulating dressings, as long as the violence of the symptoms may demand.

Throughout the disease, the intestines ought to be frequently opened by the administration of purgatives, and the occasional use of clysters. Calomel alone, or combined with jalap or rhubarb, is preferable to any other purgative.

Another important object in the treatment of the hives, is to assist the expectoration, and promote a determination to the surface of the body. This may be accomplished by the exhibition of ipecacuanha. Tartar emetic, or James's powder, in doses sufficient to excite nausea—and to hasten the effect, the warm bath, as before directed, should be used.

By promptly resorting, upon the very first attack, to the means which have been pointed out, the progress of this complaint may probably be arrested; but by neglecting these, and depending upon some trifling remedies, the inflammatory action increases, and the practitioner is often compelled to witness the death of the patient, when by promptitude and early treatment in the commencement of the disease, such a result might probably have been prevented.

During the progress of this disorder, there is usually an accumulation of mucous in the throat or windpipe; and it therefore is adviseable to administer a gentle emetic, occasionally, throughout the complaint; that, if possible, the effused fluid, or a real membrane which often lines the windpipe, may be thrown off. Inhalations of the vapour arising from warm water and vinegar, often aids in facilitating the expectoration.

After copious depletion, by bleeding, vomiting, purging and blisters; where the inflammatory symptoms have subsided, and the disease seems almost entirely spasmodic, we may venture to give a few drops of laudanum

every two or three hours, combined with ipecacuanha, or a solution of tartar emetic, for the purpose of procuring rest, and a remission of the spasms.

When the disease has been entirely subdued, to prevent a recurrence of the attack, the system must be invigorated by tonics and stimulants: such as Peruvian bark, wine, some preparation of iron, and cold bathing, assisted by nourishing food and suitable exercise. In the opinion of a physician of experience, after the first bleeding, and the administration of an emetic, a frequent use of the warm bath, with small nauseating doses of tartar emetic, is the best mode of treatment.

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## OF THE MUMPS.

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THIS disease is supposed, by many, to be the consequence of contagion, and afflicts the patient but once during life;—children are more liable to it than adults. It is distinguished by an external swelling, that arises most commonly on both sides of the neck, but in some instances is confined to one.

**SYMPTOMS.**—This 'complaint commences with a slight fever, which is soon followed by stiffness of the neck, and swellings about the angles of the lower jaw. These tumours are often hard and painful, and sometimes increase to such a size, as greatly to impede the breathing, and almost prevent the patient from swallowing food. The swelling and feverish symptoms continue to increase until the third or fourth day. After this period, the tumefaction of the part subsides, and the febrile symptoms are diminished.

As the tumours subside, the testicles of men, and the breasts of women become affected by hardened enlargements. These, for the most part, are not attended with any unpleasant consequences.

Sometimes, the tumours of the neck and throat subside, without being succeeded by the above mentioned symptoms; or if the testicles and breasts do become affected, the swellings are speedily repressed. In such cases, the fever often becomes very aggravated, is attended with delirium, and there is frequently a fatal termination of the disease.

This is, however, by no means a frequent occurrence; and, indeed, danger need rarely be apprehended, unless the brain has become congested, or otherwise, severely affected.

**MODE OF TREATMENT.**—The mumps do not often require much medical assistance; and all that is in general requisite, is to keep the neck and face warm; occasionally bathing the parts affected, with a mixture of a half table spoonful of sweet oil, and sixty drops of laudanum; the bowels ought to be kept open with the mildest laxatives, as a mixture of sulphur and cream of tartar; and the patient should avoid all exposures to cold.

When from any cause there is a sudden recession of the tumours of the neck, fever often becomes considerable, and there is occasional pain in the head, with a full hard pulse, so as to induce an apprehension that the brain will become affected. Under such circumstances, it is necessary to endeavour to reproduce the swelling by the application of warm poultices, &c.

To obviate the unpleasant consequences attendant on such recessions, venesection ought to be immediately resorted to; if the symptoms are in any degree aggravated, this should be repeated as often as the violence of the case demands.

Cathartics are, also, often necessary, and in many cases a blister may be applied to the fore part of the neck with very great advantage.

When the testicles become affected, and are much



swelled, every endeavour should be made to prevent suppuration from ensuing, and we are therefore to have recourse to bleeding, both general and topical; cathartics, cooling applications, and a suspensory bag. Much the same means are to be adopted, where from a retrocession of the tumour of the neck, the female breast becomes hardened and swelled.

In this complaint it becomes necessary that the patient should confine himself to the house; the neck should be defended from cold by the application of flannel, and the diet should be spare, and the drink mild.



## OF INFLAMMATION OF THE LIVER.



THIS disease, like most other inflammatory affections, has two varieties, dependent on the more violent and rapid, or the more tardy and obscure progress of the symptoms. The first form is denominated the acute, the second the chronic variety.

The usual symptoms of the acute form are fever, soreness and pain in the region of the liver, often extending to the shoulder of the affected side; difficult respiration, short dry cough, with occasional vomiting, and a pale or yellowish colour of the skin and eyes; the tongue is furred, the bowels are irregular, though mostly costive; the urine often of a saffron colour; the skin is dry, the thirst extreme, and there is great difficulty of lying on the left side. The symptoms, however, are various; depending on the degree of inflammation, and the part of the liver affected.

**CAUSES.**—Besides the causes producing other inflammations, such as the application of cold, external injuries from contusions, blows, &c. This disease may be occasioned by violent exercise; by intense summer heats; by long continued intermittent and remittent fevers; by high living, and an intemperate use of vinous and spirituous liquors, but more particularly the latter, and by various solid concretions in the substance of the liver. In five cases out of six, the exciting cause of acute inflammation of the liver, will be found to be partial application of cold or wet, when the body is heated or over fatigued by violent exercise.

\* Inflammation of the liver, when properly treated, is rarely fatal. A violent fever, excessive thirst, and a constant hiccuping may, however, be considered dangerous symptoms.

A scirrhus or hardened and swelled state of the liver, is sometimes induced by a continuance of the disease, or the inordinate use of spirituous liquors. If the patient attends strictly to his diet, which should be vegetable, he may, nevertheless, live a number of years without suffering any great inconvenience; “but, if he indulge in animal food, and strong liquors, or take medicines of an acrid or irritating nature, the scirrhus will probably be converted into a cancer, which must infallibly prove fatal. The disease of the liver has also a great tendency to suppuration.† When suppuration occurs, and the abscess points outwards—if the matter is discharged by incision, the patient has some chance of recovery; but when it bursts within the cavity of the abdomen or belly, or into the chest, the case almost always proves fatal. Sometimes, however, such dangerous cases terminate favourably.

**MODE OF TREATMENT.**—In the commencement of the disease, bleeding is generally found serviceable, and it is necessary to carry this to as great an extent as

\* See Good's Study of Medicine.

† Suppuration is that morbid action by which pus or matter is deposited in inflammatory tumours.

the violence of the symptoms, and the strength of the patient will allow. Cupping or leeching, in those cases which are unattended with much pain or fever, would perhaps, be preferable to general depletion; but, in those where the pain is severe, and the pulse full and strong, repeated venesection will be necessary.

Free purging with calomel should immediately follow the bleeding. This article should be given in the evening, before retiring to rest, and worked off the next morning with Epsom salts, castor oil, or magnesia, until the bowels are properly evacuated.

If, notwithstanding, the above mentioned treatment, the symptoms continue unaltered, a succession of large blisters, applied over the seat of pain, will probably, be of service. As in most other inflammatory affections, to excite perspiration is considered by the most eminent writers, an important indication in the cure of this complaint. This may be effected by giving nauseating doses of tartar emetic alone, or in combination with nitre; and warm diluent drinks may be used to assist in the operation. Where the skin is dry, and the pain continues severe, the warm bath will sometimes prove a useful remedy.

When the inflammatory symptoms have been thus, in a degree moderated, mercury, in small repeated doses will be requisite, with a view to its constitutional influence. The most proper plan of introducing mercury into the system, is to rub about a dram of the ointment upon the side affected, or on the groins, every evening until the patient is sensible of a soreness of the gums, and an unpleasant metallic taste. When the symptoms, however, are violent in their character, and the disease rapid in its progress, it may be desirable more speedily to produce a constitutional effect: to produce which, two or three pills of calomel, one grain each, should be given; during the twenty-four hours, while the use of the ointment is continued. Should the bowels be operated on by this medicine, it will be necessary to add to each pill, the fourth of a grain of opium. This course should be pursued until there is some degree of salivation, or until a salutary change of the symptoms has been effected. "It

will often be found, however, that the patient will bear a long continuance of the mercurial plan, without any affection of the mouth, and will gradually and insensibly improve under it; the soreness and tension subsiding, the cough diminishing, the pulse becoming slower, and the heat and dryness of the skin yielding to a pleasant moisture, all which, are prognostics of a favourable issue.\*

In every case of acute inflammation of the liver, especially where the symptoms of fever run very high, a farinaceous or gruel diet should be rigidly enjoined at the commencement, and animal food of all kinds strictly avoided; the drinks are to be cool, and acidulated with the vegetable acids.

In *Chronic Inflammation of the Liver*, the symptoms which are characteristic of the acute form, show themselves much more obscurely. The pulse is something quicker than natural, and almost invariably intermitting; the pain in the region of the liver is so dull, that the patient suffers very little inconvenience from it, unless the organ be pressed upon; there is also an indistinct uneasiness commonly, though not always, about the right shoulder; the appetite fails, the animal spirits are dejected, the bowels are generally costive, and the stools mostly clay coloured. There is also usually sallowness of the skin, and the disease tending to a suppuration or to a scirrhus enlargement of the liver, and a wasting of the flesh. This variety of the complaint is more likely to occur in hot climates, than even the acute form.

**CAUSES.**—The most common cause is excess in eating and drinking of such articles as are of too stimulating a character, though it is often a consequence of long protracted intermittent fevers.

**MODE OF TREATMENT.**—In the cure of the chronic variety of inflammation of the liver, most physicians

\* See Clark's diseases of "Long Voyages."—vol. 2d. p. 404.



give the preference to mercury, which is undoubtedly the most effectual practice. An active cathartic being previously administered, it should be given slowly and in small doses, so as to keep up a metallic taste in the mouth, for a considerable time, as it promotes the secretion of bile, and excites the extreme vessels on the surface. To increase the latter effect, it has, however, been found useful, to combine with it a small proportion of antimonial powder, as likewise of opium, to protect the bowels from irritation.

In conjunction with these, the bitter narcotics may be employed; and where they agree with the stomach, even the mineral acids. The nitric acid has occasionally been used as a substitute for mercury and in those cases where, from peculiarity of constitution, that article could not be used, it has proved of very essential service. As an auxiliary remedy, it may, however, be generally employed with safety and advantage to the patient. It should be taken in doses of ten or fifteen drops three or four times a day.

The surface of the patient should also be attended to; and that it may be kept in as healthy a condition as possible, gentle exercise and the warm bath should be taken, and flannel worn next to the skin.

Frictions with the hand or flesh brush, over the region of the liver, will be found, in no slight degree, to excite that organ to a healthy secretion of bile.

Where there is much local uneasiness, cupping or leeching, together with a repetition of blisters to the part, may be had recourse to with advantage. General bleeding, in this form of the complaint, is rarely admissible.

Where the liver has been exceedingly enlarged, decided benefit has sometimes been derived from the application of a plaster of ammoniacum, (*see Dispensatory*), spread largely over the diseased surface, so as to act medically, as well as upon the principle of a bandage in giving some support.

During the whole treatment, the bowels should be kept freely open, and the mouths of the secreting vessels constantly excited. With this view, the mercurial purges are preferred, to be taken occasionally at bed time; and,

as in the acute form of the disease, to be succeeded by a dose of salts, on the following morning.

The diet best adapted for persons labouring under the chronic form of this disease, is such as is nutritive and of easy digestion, avoiding salted meats and fat substances. Gradually it may be improved by the addition of broths, light animal food, &c. until health is perfectly restored. He who labours under obstructed liver, and hopes to prolong his existence, must abandon what are called the pleasures of the table, and observe a rigid temperance with respect to wine. If wine is drank, it ought to be diluted with water; but in most cases, this last alone will be the best beverage. Malt liquors will seldom agree, and spirituous ones ought to be shunned, as poison. Late hours and night air ought to be cautiously avoided.

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## OF THE JAUNDICE.

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THIS disease may, at its commencement, be known by a yellowness of the skin and in the white of the eye; by a bitter taste in the mouth, and by some pain or uneasiness in the region of the liver.

**CAUSES.**—Jaundice may be caused by a redundant secretion of the bile, or by an obstruction of the biliary canals, which should convey it from the liver to the intestines.

The bile thus secreted in unnatural quantities, or prevented by obstructions from supplying the place of its destination, is absorbed and mingled with the blood in the

general circulation. It is this that causes the universal sallowness observable in the complaint.

The passions of the mind also, are sometimes productive of jaundice. In such cases, it is supposed, the disorder is owing to a spasmodic constriction of the biliary tubes.

**SYMPTOMS.**—The patient at first complains of excessive weakness, and has great aversion to every kind of motion, the skin is dry, and usually there is a kind of itching or pricking sensation over the whole body, the stools are of a whitish or clayey appearance, and the urine high coloured, giving white clothes a yellowish tinge. The breathing is difficult, and the patient complains of an unusual load or oppression on his breast. There is heat in the nostrils, a loathing of food, sickness at the stomach, vomiting, flatulency, and other symptoms of indigestion.

Where the patient is young, the jaundice recent, and occasioned by obstructions in the bile ducts, without being complicated with any other malady, by proper treatment we may be able to effect a speedy cure; but where it is brought on by tumours of the neighbouring parts, or has arisen in consequence of some other diseases, attended by symptoms of obstructed viscera, our endeavours most likely, will not be crowned with success.

Arising during a state of pregnancy, it is of little consequence, as it will cease on parturition.

A gradual diminution of the sense of weight and oppression on the breast, a return of appetite and of the digestive powers, the bowels becoming more open, the urine more copious, and ceasing to tinge linen of a yellow colour, are all to be regarded favourable symptoms. On the contrary, a violent pain in the side, or in that region immediately over the stomach, attended with a quick pulse, loss of strength and flesh, with watery swellings of the extremities, chilliness, watchfulness, melancholy, or hiccup denote great danger.

**MODE OF TREATMENT.**—If the patient be of full sanguine habit, and complains of pain in the right

side, about the region of the liver, bleeding, proportionate to the severity of the symptoms and strength of the patient, will be necessary.

After this, a vomit must be administered, and, if necessary, repeated; unless the pain in the side be very severe, and the signs of inflammation high. Vomiting, under such circumstances, would certainly prove injurious. Where, however, the jaundice is not attended with inflammation, emetics are often of very essential service. Twenty or thirty grains of ipecacuanha will be a sufficient dose for an adult; and this may be assisted in its operation by warm chamomile tea, or luke warm water.

The bowels should next be opened with calomel, combined with jalap or rhubarb—fifteen grains of the former, and a like proportion of either of the latter, will probably produce the effect. Throughout the attack, this dose should be occasionally given, so that the bowels may be kept in a laxative state.

Fomentations about the region of the stomach and liver, and frictions with warm flannel or the flesh brush are likewise beneficial.

When the symptoms are severe, after venesection the warm bath should be directed; and in this the patient should continue as long as his strength will permit; after which, he should be placed in bed, and an opiate given every three or four hours until relief is obtained. As the stomach during these attacks is usually irritable, so that almost every thing taken into it is immediately rejected; opium administered in pills will more probably be retained than when given in any other form.

Besides these means, bladders filled with warm water, and applied to the seat of pain, will be found to afford relief.

Dr. Buchan remarks, that he has seen considerable benefit in a very obstinate jaundice, from a decoction of flaxseed. Four ounces of the seed may be boiled in two quarts of ale, and sweetened with coarse sugar. The dose is half a pint every morning. It may be continued for eight or nine days.

The soluble tartar, (see Dispensatory,) he also re-



marks is a very proper medicine in the jaundice. A dram of it may be taken every night and morning in a cup of tea or water-gruel. If it does not open the bowels the dose may be increased.

The diet in this complaint should be cool, light, and diluting; consisting chiefly of ripe fruits and mild vegetables: as apples, boiled or roasted; stewed prunes; preserved plumbs, &c. Veal and chicken broth, with light bread, are likewise very proper. The drink should be buttermilk whey sweetened with honey, or a decoction of some cool opening vegetables.

The patient should take as much exercise as he can bear on horseback or in a carriage. Walking, running, and even jumping, are likewise proper, provided he can bear them without pain, and there are no symptoms of inflammation. Patients have been often cured of jaundice by a long journey, after medicines had proved ineffectual.

As the disease is often occasioned by sedentary habits, combined with a dull melancholy disposition, not only exercise, but amusements of all kinds will be beneficial. Whatever, indeed, tends to promote the circulation, and elevate the spirits must have a good effect.

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## CHOLERA MORBUS.

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THIS disease consists in vomiting and purging; pain in the bowels; cold clammy sweats, and faintings.

**CAUSES.**—Many causes of this disease have been assigned by both ancient and modern writers: such as

sudden changes of weather, from a hot, dry atmosphere, to a cold damp one; eating unripe acid fruits; surfeits of any kind; a peculiar bad state of the atmosphere; drinking cold water, or eating ice creams during very warm weather. Dr. Buchan states, that “a redundancy and acrimony of the bile,\* strong acrid purges or vomits, violent passion or affections of the mind, as fear, anger, &c” will produce the complaint.

This disease is divided by some writers into three kinds: the *bilious*, *wind*, and *spasmodic cholera*. But we think this division unnecessary, as it is not uncommon for all of these various conditions to occur in the different stages of one case. Some cases are ushered in by copious bilious discharges; others by acrid watery secretions, which are eventually succeeded by bile, unless the case terminates fatally. In this country cholera morbus often makes its attack suddenly; sometimes the patient is prostrated immediately; discharging, in the first place, both up and down, large quantities of vitiated intestinal secretions; though, often the bile will make its appearance in the first discharges; but these latter cases are generally of the milder form.

Where the secretions of the liver are entirely suppressed, resisting every means of exciting them, the attack being, as it here generally is, violent, the patient is almost certain to die; but when the bile appears in the discharges, we may generally hail it as a favourable symptom. Dr. Johnson states, that “this disease does not depend on an increase, but on a diminution, and in many cases a total suppression of the biliary secretion.”† He states further, “that an increased secretion of bile, so far from being the cause of cholera morbus, is, upon

\* This opinion of Dr. Buchan, we believe to be entirely erroneous. The excess and bad quality of the bile is the effect of the cause—not the cause itself, but a mere condition or symptom of the disease.

† Here Dr. Johnson, like Dr. Buchan, has fallen into a similar error, but on the opposite extreme. We consider it impossible, that a symptom of a disease should be the cause of that disease. A deficiency of bile is only a condition of the disordered state which has been produced by a very different cause.

the whole, a favourable symptom; and that, in the very worst forms of the disease, it is entirely absent.

The disease occurs in both ways; sometimes with a redundancy, at other times a deficiency of bile: the former is the most common in this country; the latter is the most fatal, and always so if it does not terminate in the former.

**SYMPTOMS.**—The attack of this complaint is generally sudden. The bowels are seized with griping pains, and the stools, which are at first thin and watery, as in common diarrhœa, are passed frequently. The stomach is seized with sickness, discharges its contents, and ejects whatever is swallowed.

In the course of a few hours, the matter vomited, as well as that which is discharged by stool, appears to be pure bile, and passes off both ways, by puking and stool, in large quantities. The griping pains of the intestines now become more severe, in consequence of the extraordinary irritation of passing bile, which excites them to partial and irregular spasmodic contractions.

Spasms are often communicated to the abdominal muscles, and to the muscle of the lower extremities.

The stomach is also affected with considerable pain, and a sense of great heat, in consequence of the same irritation. There is usually great thirst, and sometimes a severe head-ache, from sympathy of the head with the stomach. The pulse becomes small and frequent, and the heat of the skin is increased. A great degree of debility, languor, and faintness speedily comes on, sometimes attended with colliquative sweats; coldness of the extremities, and such like symptoms, threatening the patient with immediate death.

**MODE OF TREATMENT.**—Bleeding is a remedy of great importance, if resorted to in the early stages of the disease, and must not be omitted when the patient is young and of a full habit; it has in some of the worst forms of the complaint, afforded relief, putting an immediate stop to the disease.

When the strength of the patient is immediately prostrated, or where the case has been neglected until the powers and energies of the system have been exhausted; the extremities have become cold, and the pulse weak and fluttering. We should use the lancet with great caution, and in the latter case omit it entirely.

After bleeding, (where it has been necessary,) calomel in large doses, compounded with opium, is to be depended on, especially where the bile is deficient. From ten to twenty grains of calomel, with two or three grains of opium for an adult, repeated every three or four hours, until it produces frequent stools, accompanied by a copious bilious secretion, will afford more decided relief than any other remedy. When it does not operate as quick as we wish, it can be assisted by injections of castor oil, mixed with spirits of turpentine, adding laudanum if necessary. If the discharges are attended with much pain, repeated injections of starch and laudanum will afford the patient relief. Fomentations of bitter herbs, steeped in vinegar, and laid over the bowels, we have known to be of decided advantage. When the vomiting is extremely obstinate, a large blister applied to the stomach, extending over the region of the liver, will be of service. If the patient is attacked with spasms, or gripings of the bowels are severe, the extremities cold, and the skin dry and cool, we must resort to the warm bath; if the debility is great, perhaps a quantity of spirits added to the bath would be of service.

Where the attack is sudden, and very severe; the patient in the course of one or two hours exhibits all the symptoms of approaching death. We must here resort to means calculated for the present to sustain life.

Dr. Johnson asserts, that "nature is here, as it were, stunned with a blow; and the struggling efforts which she makes to relieve herself by vomiting, &c. only exhaust her the sooner, if not effectually assisted by art. We must therefore have recourse to more powerful means than wine, laudanum, or lavender. The warm bath; cordials of the most stimulating kind, such as warm punch or toddy as well as opium and calomel, are all brought into requisition, together with friction, hot flannels, &c."



The drinks of the patient may consist of mutton or chicken broth, barley water, toast water, slippery elm or flaxseed tea, or coffee without cream or sugar. So long as the irritation of the stomach and bowels continues, the patient must be very careful to avoid every species of irritating food: solid articles should be prohibited entirely until the strength of the digestive organs is in a degree restored; and to effect this, some of the vegetable tonics will be admissible: such as an infusion of columbo, quassia, orange peel, chamomile flowers, &c. If the looseness of the bowels continues, the addition of cinnamon, cloves, kino, catechu, &c. will be of importance; but these must be avoided so long as there is any fever. In some cases, the mineral tonics will be most suitable, such as the elixir of vitriol, tinct. of iron, Fowler's solution, or blue vitriol; this last may be given in doses of the eighth of a grain.

It is highly important, during the recovery, to avoid all kinds of exposure, especially night air, cold damp weather, wet feet, sudden checks of perspiration, very hot sun, summer fruit, and all indigestible substances. Light flannel worn next the skin, and woollen socks, will have a direct tendency to prevent relapses.

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## INFLAMMATION OF THE STOMACH.

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ALL inflammations of the bowels are dangerous, and require speedy assistance; as they frequently end in a suppuration, and sometimes in a mortification, which is certain death.

CAUSES.—Inflammation of the stomach may pro-

ceed from any of the causes which produce inflammatory fever; such as cold liquor drank while the body is warm, obstructed perspiration, or the sudden striking in of any eruption. It may likewise proceed from a diseased state of the liver, or from acrid and stimulating substances taken into the stomach; as strong vomits or purges, corrosive poisons, &c. When gout has been repelled from the extremities by improper treatment, it often occasions an inflammation of the stomach. Hard or indigestible substances, as bones, the stones of fruit, &c. may likewise have that effect.

**SYMPTOMS.**—This disease is attended with a fixed pain and burning heat in the stomach; great restlessness and anxiety; a small, quick, hard pulse; vomiting, or, at least, a nausea and sickness; excessive thirst; coldness of the extremities; difficulty of breathing; cold clammy sweats; and sometimes convulsions and fainting fits. The stomach is often swelled, and feels hard to the touch. One of the most certain signs of this disease is, the sense of pain which is experienced upon taking any kind of food or drink, especially if it be too hot or too cold.

When the patient vomits every thing he eats or drinks, is extremely restless, has a hiccup, with an intermittent pulse, or frequent fainting fits, the danger is very great.

**MODE OF TREATMENT.**—Bleeding in this disease is absolutely necessary, and is almost the only thing that can be depended on. When the disease proves obstinate, it will be proper to repeat this operation, nor must the low state of the pulse deter us. The pulse indeed, generally rises upon bleeding, and as long as this is the case, the operation is safe.

Frequent fomentations with lukewarm water, or a decoction of emollient vegetables, are likewise beneficial. Flannel cloths dipped in these, must be applied to the region of the stomach, and removed as they grow cool. They must neither be applied too warm, nor be suffered to continue till they become quite cold, as either of these extremes would aggravate the disease.

The feet and legs ought likewise to be frequently

bathed in lukewarm water, and warm bricks may be applied to the soles of the feet. The warm bath, if it can be conveniently used, will be of great service.

In this, and all other inflammations of the bowels, a blister, applied over the part affected, is one of the best remedies.

The only internal medicines which we venture to recommend in this disease, are mild clysters. These may be made of warm water, or thin water-gruel; and if the patient is costive, a little sweet oil, honey, or manna, may be added. Clysters answer the purpose of an internal fomentation, while they keep the body open, and at the same time nourish the patient, who is often, in this disease, unable to retain any food upon his stomach. For these reasons, they must not be neglected, as the patient's life may depend on them.

All heating and irritating food and drink are carefully to be avoided. The weakness of the patient may deceive the bystanders, and induce them to give him wines, spirits, or other cordials; but these increase the disease, and often occasion sudden death. The inclination to vomit may likewise impose on the attendants, and make them think that a puke is necessary: but that too is always dangerous.

The food must be light, thin, cool, and easy of digestion. It must be given in small quantities, and should never be quite cold nor too hot. Thin gruel, made of barley, light toasted bread softened in boiling water, or very weak chicken broth, are the most proper. The drink should be clear whey, barley water, water in which toasted bread has been boiled, or decoctions of emollient vegetables.

## INFLAMMATION OF THE INTESTINES.

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THIS is one of the most painful and dangerous diseases to which mankind is liable. It generally proceeds from the same causes as the inflammation of the stomach; also, from costiveness, worms, eating unripe fruits, or great quantities of nuts; drinking large quantities of stale beer or ale, sour wines, cyder, &c. It may likewise be occasioned by a rupture; by hard tumours forming in the intestines, or by the opposite sides of the canal adhering.

The inflammation of the intestines is variously denominated, according to the name of the parts affected. The treatment, however, is nearly the same, whatever part of the intestinal canal be the seat of the disease; we shall therefore omit these distinctions, lest they should perplex the reader.

**SYMPTOMS.**—They are nearly the same as in the foregoing disease; only the pain, if possible, is more acute, and is situated lower. The vomiting is likewise more violent, and sometimes even the excrements, together with the clysters, are discharged by the mouth. The patient is continually belching up wind, and has often an obstruction of his urine.

While the pain changes from place to place, and the vomiting returns only at certain intervals, and while the clysters pass downwards, there is ground to hope; but when the clysters and excrements are vomited, and the



patient is exceeding weak, with a low, fluttering pulse, a pale countenance, and a disagreeable breath, there is great reason to fear that the consequences will prove fatal. Clammy sweats, black fœtid stools, with a small intermitting pulse, and a total cessation of pain, are signs of mortification, and of approaching death.

**MODE OF TREATMENT.**—Bleeding in this, as well as in the preceding disease, is of the greatest importance. It should be performed as soon as the symptoms appear, and must be repeated according to the strength of the patient, and the violence of the attack.

A blister is likewise to be applied immediately over the part where sensations are most violent. This not only relieves the pain of the bowels, but even clysters and purgative medicines, which before had no effect, will operate when the blister begins to rise.

Fomentations and laxative clysters are by no means to be omitted. The patient's feet and legs should frequently be bathed in warm water; and cloths dipped in it applied to the belly. Bladders filled with warm water may likewise be applied to the region of the stomach, and warm bricks, or bottles filled with warm water, to the soles of the feet. The clysters may be made of barley water or thin gruel with salt, combined with sweet oil or fresh butter. These may be administered every two or three hours, or oftener, if the patient continues costive.

When the disease does not yield to clysters and fomentations, recourse must be had to pretty strong purgatives; but as these, by irritating the bowels, often increase their contraction, and thus frustrate their own intention, it will be necessary to join them with opiates, which, by allaying the pain, and relaxing the spasmodic action of the intestines, greatly assist the operation of purgatives.

Epsom salts answer the purpose of opening the bowels very well. Two ounces of this may be dissolved in a pint of water, or thin gruel, and a teacupful of it taken every half hour 'till it operates. At the same time, fifteen, twenty, or twenty-five drops of laudanum may be given in a glass of peppermint or simple cinnamon-water, to allay irritation, and prevent vomiting.

Acids have often a very happy effect in preventing the vomiting, and appeasing the other violent symptoms of this disease. It will therefore be of use to sharpen the patient's drink with cream of tartar, juice of lemon; or, when these cannot be obtained, with good vinegar.

But it often happens that no liquid whatever will stay on the stomach. In this case, that the bowels may be moved, the patient must take pills; the following answer very well: take jalap in powder, and vitriolated tartar, (see Dispensatory,) of each half a dram; opium one grain, Castile soap as much as will make the mass fit for pills. These must be taken at once, and if they do not operate in a few hours, the dose should be repeated.

If a stool cannot be procured by any of the above means, it will be necessary to immerse the patient in warm water up to the breast. This has often succeeded when other means had been tried in vain. The patient must continue in the water so long as he can bear it without fainting, and if one immersion has not the desired effect, it may be repeated as soon as the patient's strength and spirits are recruited. It is safer for him to go frequently into the bath, than to continue in it too long at a time; and it is often necessary to repeat it several times before it has the desired effect.

It has sometimes happened, after all other means of procuring a stool had been tried in vain, that this was brought about by immersing the patient's lower extremities in cold water, or dashing it upon his legs and thighs. This method, when others fail, at least merits a trial. It is, indeed, attended with some danger, but a doubtful remedy is better than none.

If the disease proceeds from a rupture, the patient must be laid with his head very low, and the intestines returned by gentle pressure with the hand. If this, with fomentations and clysters, should not succeed, recourse must be had to a surgical operation, which may give the patient relief.

To avoid inflammation of the intestines, care must be taken, never to be too long without a stool; and to beware of eating too freely of sour unripe fruits. It likewise proceeds frequently from cold caught by wet

clothes, &c. but especially from wet feet; these causes should, therefore, also be avoided.

The diet in this complaint should be the same as in inflammation of the stomach. The patient must be kept quiet, avoiding cold and all violent passions of the mind. His food ought to be very light, and given in small quantities; his drink weak and diluting; as clear whey, barley-water, and such like.

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## OF THE COLIC.

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THE colic has a great resemblance to the two preceding diseases, both in its symptoms and method of cure. It is generally attended with costiveness and acute pain of the bowels; and requires diluting diet, evacuations, fomentations, &c.

Colics are variously denominated according to their causes, as the *flatulent*, the *bilious*, and the *nervous* or *Painter's colic*. As each of these require a particular method of treatment, we shall point out their symptoms, and the means to be used for their relief.

The *flatulent*, or wind-colic, is generally occasioned by an indiscreet use of unripe fruits, meats of hard digestion, windy vegetables, fermenting liquors, and such like. It may likewise proceed from an obstructed perspiration, or catching cold. Delicate people, whose digestive powers are weak, are most liable to this affection.

The flatulent colic may either affect the stomach or intestines. It is attended with a painful stretching of the affected part. The patient feels a rumbling in the

bowels, and is generally relieved by a discharge of wind, either upwards or downwards. The pain is seldom confined to any particular part, as the gas wanders from one division of the intestines to another, until it finds a vent.

When the disease proceeds from windy liquor, green fruit, sour herbs, or the like, the best medicine, on the first appearance of the symptoms, is twenty or thirty drops of laudanum, or one grain of opium, to be given every hour until relief is obtained. The patient should likewise sit with the feet upon a warm hearth, or apply warm bricks to them; and warm cloths may be applied to the stomach and bowels.

This is the only colic wherein ardent spirits, spices, or any other thing of a hot nature, may be ventured upon. Nor indeed are they to be used here, unless at the very beginning, before any symptoms of inflammation appear. We have reason to believe, that a colic, occasioned by wind or flatulent food, might always be cured by spirits and warm liquors, if taken immediately upon perceiving the first uneasiness; but when the pain has continued for a considerable time, and there is reason to fear an inflammation of the bowels already begun, all stimulating articles are to be strictly avoided, and the patient is to be treated in the same manner as for inflammation of the intestines.

Several kinds of food, as honey, and eggs, occasion colics in some particular constitutions. We have generally found the best method of cure for these, was to drink plentifully of diluting liquors, such as warm water-gruel, water with toasted bread soaked in it, &c.

Colics which proceed from excess, and indigestion, generally cure themselves, by occasioning vomiting or purging. These discharges are not to be stopped, but promoted by drinking plentifully of warm water or chamomile tea. When their violence is over, the patient may take a dose of salts or castor-oil, to carry off the dregs of his debauch.

Colics occasioned by wet feet, or catching cold, may generally be removed at the beginning, by bathing the feet and legs in warm water, and drinking such warm diluting liquors as will promote the perspiration, such as



weak wine-whey, or water-gruel, with a small quantity of spirits in it.

Those flatulent colics, which prevail so much among country people, might generally be prevented, were they to change their clothes when they get wet. They ought likewise to drink some warm spirituous liquor after eating any kind of green vegetables. We do not recommend dram drinking, but in this case, spirits prove a real medicine, and the best that can be administered. A glass of good peppermint water will have nearly the same effect as a glass of whiskey or brandy, and, in most cases, is to be preferred.

The *bilious* colic is attended with very acute pains about the region of the navel. The patient complains of great thirst, and is generally costive. He vomits a hot, bitter, yellow coloured bile, which being discharged, seems to afford some relief, but is quickly followed by the same violent pain as before. As the distemper advances, the propensity to vomit sometimes increases, so as to become almost continual, and the proper motion of the intestines is sometimes so far perverted, that fecal portions of food are thrown up.

If the patient be young and strong, and the pulse full and frequent, it will be proper to bleed. After which, give forty drops of laudanum, and administer twenty grains of calomel, with a clyster, that the bowels may be freely opened. If this effect be not produced in four or five hours, ten grains more of calomel may be given and repeated at such intervals as the severity of the symptoms demand, until an evacuation is produced. Between each dose, a laxative clyster may also be administered. The warm bath will also be found useful in overcoming that spasmodic stricture of the intestines which so often resists the action of the most powerful cathartics. A quantity of opium, proportioned to the age of the patient, may either be combined or alternated with the calomel. This also has the effect of relieving spasm; clear whey, gruel, barley-water, flaxseed tea, or weak chicken-broth, are likewise very proper.

Besides bleeding and purging, it will be necessary to foment the belly with cloths dipped in warm water; and

if this should not succeed, the patient must be immersed up to the breast in warm water.

In the bilious colic, the vomiting is often very difficult to restrain. When this happens, the patient may drink a decoction of toasted bread, or an infusion of garden-mint in boiling water. Should these not have the desired effect, the effervescing draught, (*see Dispensatory*;) with a few drops of laudanum in it, may be given, and repeated according to the urgency of the symptoms; a spice plaster should also be applied to the pit of the stomach.

Such as are liable to frequent returns of the bilious colic, should use flesh sparingly, and live chiefly upon a light vegetable diet. They should also take frequent doses of magnesia, or any cool saline purge.

The last species to be mentioned, is that denominated by Buchan, the nervous; but which has more generally received the title of the "*painter's colic*." It is not, however, confined exclusively to that class of society; it also prevails among miners, glaziers, gilders, plumbers, and printers, but more particularly affects the manufacturers of white lead: indeed, all who are in any degree exposed to the concentrated fumes of this metal, are liable to the complaint.

This form of colic usually advances very gradually, with pain in the pit of the stomach and in the bowels, twisting at the navel, belchings, sick stomach, thirst, anxiety, and constipation. The pulse for the most part, is quick, small and corded, though sometimes it is but little affected. The pain after a short continuance, increases, the belly becomes so tender as scarcely to bear the weight of the bed-clothes, and the muscles of the abdomen contract, so as to form various knotty eminences.

The bowels are spasmodically affected, and vomitings of dark bile ensue; there is pain in the bladder and rectum, and very severe sensations are experienced across the loins.

No affection of the bowels is more excruciating than this form of colic; it often continues eight or ten days with very little intermission, the bowels remaining obstinately bound, notwithstanding the use of the most active cathartics.

In the treatment of this disease, the primary indication where the attack is severe, and the patient young and robust, is to guard against the consequences of inflammation. With this indication in view, venesection is of the greatest consequence; this is to be effected without regard to the state of the pulse. The bowels should also be freely evacuated with the milder purges, as Epsom salts, castor oil, &c. and the action facilitated by laxative clysters.

When these measures fail, recourse should be had to a combination of calomel and opium, (with the view of acting upon the bowels and overcoming spasm at the same time;) if necessary, this may be aided with injections, made by infusing one dram of tobacco in a pint of water, of which one third should be used every two hours, until the whole has been given. But as great danger is to be apprehended from the improper use of the infusion, the fumes of the article, which perhaps are somewhat safer, may be substituted. These may be administered, by partly filling the bowl of a pipe with cut tobacco, and having lighted it, lay over the bowl a piece of gauze or thin linen; the stem of the pipe being now introduced into the rectum, let the smoke of the tobacco be blown through the pipe into the intestines. This, or throwing cold water on the extremities, in violent cases, will often prove effectual in opening the bowels, when all other means have failed.

When our endeavours, not only to procure stools, but also to stop the vomiting and spasms, have been crowned with success, we are carefully to guard against a return of the disease, by keeping the intestines open and regular with some aperient medicine, occasionally administered. Opium, given in small quantities, will also have a tendency to prevent a recurrence of the attack.

The tone of the system may afterwards be increased by the metallic and bitter vegetable tonics.

If, after the removal of costiveness, the pain still continues, alum, in doses of ten or fifteen grains, as recommended by Percival, may be exhibited. With the same object in view, the vitriolic solution of Mosely, (*see Dispensatory*,) has been recommended in doses of a table

spoonful every four or five hours; previous to its administration, however, the bowels should always be freely evacuated.

As a preventive to the complaint, the same article may be used by those who are constantly exposed to any of the above mentioned exciting causes.

Those who work in lead, says Dr. Buchan, should never go to work fasting, and their food ought to be oily or fat. They may take a glass of sweet oil with a little brandy or whiskey, but they should never take spirits alone. The food should be rich, but of a liquid nature, such as fat broths, &c.; low living is always injurious.

Persons exposed to any of the effluvia, which are productive of the complaint, should frequently go out of the tainted atmosphere, and never suffer themselves to become costive.

Professor Chapman, of Philadelphia, believing that mercury and the preparations of lead are mutual antidotes, in the latter stages of those cases known to be caused by lead, recommends highly the use of calomel, with a view to salivate, combined with sufficient opium to alleviate pain.

Dr. Clutterbuck, in his treatise on the poison of lead, has mentioned several successful cases of the free use of mercury internally and by frictions, in the colic and palsy of the arm, caused by the fumes of lead. Advice coming from such respectable authority, should certainly command our attention, and, when the disease is clearly ascertained to proceed from that mineral, it will be advisable to make trial of the plan proposed by the gentlemen above mentioned.

In the treatment of that species of palsy consequent to this form of disease, Dr. Pemberton is of opinion, that besides the remedies appropriate to the original complaint, some assistance of a mechanical nature might also be applied to the paralytic limb; thus, by stimulating frictions, and by splints calculated to keep the muscles in their proper situations, they would be more likely to recover their lost action.

If, after the symptoms are subdued, the patient remains weak and languid, he must take exercise on horseback,



and use daily a proportion of Peruvian bark infused in wine. When the bark cannot be obtained, a strong infusion of quassia or gentian, taken cold, may be substituted.

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## OF THE DYSENTERY.

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THE symptoms of this disease are frequent, bloody, slimy discharges, a painful urgency to stool, during which little or nothing can be passed; sometimes, however, there is discharged a small quantity of hot, slimy matter, frequently tinged with blood; loss of appetite and strength, frequent nausea, and occasional vomiting when any substance is taken into the stomach; the tongue is sometimes yellow, at other times white, and not unfrequently dry and shining; the pulse generally frequent and hard, though occasionally soft and compressible; the eye sunk and heavy; the skin either dry or covered with a cold clammy perspiration, generally increased in its temperature; griping pains in the bowels, with soreness if the hand is pressed upon the belly.

Dysentery, according to Dr. Drake's statement, appears every few years in the western country as an epidemic, and cases occur occasionally during the warm variable season of every year. "A few cases," says the Doctor, "of dysentery occur every summer, and once in every two or three years it is epidemic. Where this is the case, its prevalence is sometimes very general, but not often mortal. Now and then it assumes a malignant character, when it is, for the most part, confined to a single family. Upon the whole, this disease appears to

be less formidable in this country than in the Atlantic states.\*

The seat of this disease has long been a subject of dispute by medical men. One has allied it closely to inflammation of the small bowels; another, to accumulation of hardened fecal matter in the large bowels; a third, to a sudden checked perspiration, throwing the matter, that ought to have passed off by the skin, into the bowels, and it there passes out of the system by stool; whilst a fourth refers it exclusively to a disordered state of the secretions of the liver.

From a close investigation of the cause and seat of this disease, both by our own and the experience of others, we are induced to believe that there is a combination of causes, producing derangements successively in all or a greater part of the abdominal organs.

Dr. Johnson remarks, that "two functions are invariably disordered from the very onset," and that they "soon draw other derangements in their train. These are the functions of the skin and liver; or perspiration and biliary secretion." He states positively, that he "never knew these functions carried on naturally in any period of the disease. The partial clammy sweats, which are sometimes seen on the surface, with the occasional admixture of foul bilious matter in the stools, so far from being objections, are proofs of this position; for, excepting the above appearances, which are unnatural, the perspiration is suppressed, and the secretion of bile entirely stopped."

As far as our own experience goes relative to the parts affected in dysenteries of this climate, we must decide in favour of its symptomatic relation to disturbances in the secretions of the liver, though we have no doubt but that the disease does, in some instances, occur primarily in some of the tissues of the bowels, the second link in the chain of cause and effect. The first impression having been made upon the skin, giving a sudden check to perspiration, breaking up the balance of circulation, and throwing a surplus of blood upon the various abdominal organs, thereby depraving their secretions; a re-

\* Drake's Picture of Cincinnati.

action must necessarily take place, the vessels labour hard to relieve themselves of the over distention, caused by this great accumulation of blood; and one potent means of effecting this is by secretion. This secretion must necessarily be depraved and irritating to the bowels, adding thereby to the general irritation of the system, and involving successively every organ of digestion, and eventually the whole body.

But, as we before remarked, dysentery in this country, is generally a symptom of a diseased state of the liver, this organ being first in the link of sympathies with the skin. Every organ of digestion depends, either directly or indirectly, upon the healthy condition of the liver, for the natural performance of its functions; the bowels are the first to suffer from any of its depravations. If there is a due proportion of healthy bile thrown into the bowels, they are regular in their motions; if there is a deficiency or total suppression of bile, there is a partial or complete constipation; and if there is an excess of vitiated, acrid biliary secretion, they become irritated, and affected by irregular spasmodic, and unnatural motions. This irritation of passing bile produces a determination of blood to those parts, oppressing their sensibilities and functions, and finally a depraved, excessive secretion is the result; which state of the bowels, is ingrafted upon the diseased condition of the liver, combining two of the most common states of the disease into one malignant, unmanagable, and often fatal case of dysentery.

**CAUSES.**—The ordinary causes of dysentery, are suppressed perspiration, or a sudden chill, sudden changes of weather from warm to cold, or from a dry to a wet state of the atmosphere, marsh exhalations, or putrid vapours of any kind; and where there is a predisposition in the patient, crude fruits or irritating food will frequently produce the disease.

“The remote causes,” says Dr. Johnson, “are the same all over the world—atmospheric vicissitudes. Perspiration and biliary secretion being in excess during the day, are so much the more easily checked by the damp chills of the night, and the consequences which ensue are

clearly deducible from the principle I have stated. In short, the same general cause produces bilious fever, inflammation of the liver, and dysentery. They are three branches from the same stem, the organ principally affected, occasioning the variety of aspect."

**MODE OF TREATMENT.**—When the patient is in the prime of life, of full habit, and there is much blood in the stools, blood-letting will be highly important, and should not be omitted, especially if there is much active fever, with a parched hot skin. After bleeding, if we suspect any irritating matters are lodged in the stomach, an emetic of ipecacuanha, dissolved in a large quantity of warm water, should be given; sometimes it will be necessary to combine a few grains of tartar emetic, blue or white vitriol with the ipecacuanha.

As soon as the stomach becomes settled, we should commence with large doses of calomel and opium, assisted by oily or starch injections, with or without laudanum, as the patient is affected with painful griping or a constant urging disposition to stool. If the symptoms indicate a primary affection of the liver, the calomel and opium should be continued until we produce bilious feculant stools, or a sore mouth. On the other hand, if you have ascertained that there is an inflammation of the mucous coat of the intestines, which can be known by the great soreness of the bowels on pressure, high fever, white furred tongue, &c. we should bleed liberally, until the pain and soreness of the bowels and the active state of the fever, have measurably subsided, then apply a blister over the whole belly; at the same time give parsley or slippery elm tea for drink, to prevent strangury.

If the skin should remain dry and parched after the fever has in some degree been reduced by bleeding, emetics, blisters, and the calomel and opium; we should resort to the warm bath, assisted by nauseating doses of tartar emetic or ipecacuanha, given sufficiently often to keep up constantly a slight nausea; this may be given alternately with the powder of calomel and opium, or combined with it. For an adult about one fourth of a



grain of tartar emetic, or two of ipecacuanha given every three hours will be sufficient. The patient will find great relief from the frequent use of mild injections, with the addition of a teaspoonful of laudanum, which can be repeated as the symptoms require its use, or the effect of the laudanum will admit its farther administration.

As soon as the active stage of the disease has yielded, the pain has entirely subsided, and the soreness of the bowels no longer remains, whether the discharges continue too frequent or not, it will be necessary to resort to tonic; and if the stools are too frequent, astringents will be necessary, though we are inclined to believe that where the disease has been properly treated in the first instance, there will be no necessity for astringent medicines, purely for their astringent effects:—colombo, quassia, and Peruvian bark, are among the tonics that will be useful, occasionally combined with cloves, cinnamon, orange peel, and chamomile flowers; good French brandy and loaf sugar—some of the pure astringent wines are also used with advantage. If there is a sourness of the stomach, combined with looseness of the bowels, lime water will be highly important.

The patient's drink throughout the disease, should be of the mucilaginous kind: such as flaxseed or slippery elm tea—toast water will occasionally be admissible; and we have ventured sometimes to allow lemonade, which is very grateful and refreshing to the patient; and we never had any cause to lament its use, though it was at the same time positively objected to by other physicians.

If it does not turn acid on the stomach, mutton or chicken broth may be used both as diet and drink; we have often been driven from its use, however, on account of its disposition to become sour in the stomach.

But little food will be admissible in the active stage of this disease, and that must be of the mild fluid or semi-fluid kind: such as mutton or chicken broth, arrow root, tapioca, sago, beef tea, strong toast water, panado without spirits or wine; but these latter ingredients will be admissible, and highly important in the latter stage of the complaint, after the fever has subsided.

During the whole period of the disease, the patient should be kept quiet in a large, cool, airy room; every thing offensive should be immediately removed, and his own, and the bed linen should be changed every day, but with great caution as to the dryness of the fresh linen—it never should be used until it has been exposed either to a hot fire, or a warm, dry sun for some time after it has been taken from the smoothing iron.

As soon as the patient's strength is sufficient, he may ride out in a carriage or on horseback, but it must be in the cool part of the day, before the dew falls, or in other words, the atmosphere must be moderately cool and dry, and then he must avoid fatigue, and in short every source of irritation, either of mind or body, and especially of the stomach and bowels, for relapses are frequent, and almost as commonly, fatal.

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## OF DIARRHŒA.

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A DIARRHŒA or looseness, in many cases, is not to be considered a disease, but a salutary evacuation, which should not be stopped unless it continues too long, or evidently weakens the patient.

CAUSES.—These may be divided into such as act on the body generally, and those which act only on the part affected. Of the former may be mentioned, the sudden application of cold to the surface of the body, by which perspiration is stopped, and the blood inordinately driven to the internal organs. Passions of the mind, dentition, retrocedent gout or rheumatism, &c. are also sometimes productive of the complaint.

Of the local causes may be enumerated; firstly, matters, such as acid fruits, oily or putrid substances, and purgative medicines taken into the stomach, acting upon the state of that organ, either from their quantity or quality.

Secondly—matters generated in the body, and thrown into the intestines; acrid bile; purulent matter; water in dropsy; worms, &c.

Thirdly—mucous matter, poured from the mucous glands of the intestines themselves, in consequence of an increased secretion: this produces the species denominated the diarrhœa mucosa, or the mucous or slimy diarrhœa.

**SYMPTOMS.**—In this complaint each discharge is usually preceded by a rumbling noise, and flatulence in the intestines, together with a sense of weight and uneasiness in the lower part of the belly; which cease as the discharge is taking place, but are again renewed before the one which is to succeed, ensues. The appearances of the stools are various. Sometimes they are thinner than natural, from the admixture of a larger quantity of fluid poured out by the exhalents of the intestines, than natural. Sometimes they are slimy, and sometimes they are green when first discharged; at others, yellow when evacuated, but becoming green on exposure to the air; occasionally, however, they are of a dark brown colour and very fœtid.

As the disease advances, the stomach becomes affected, and sickness, nausea and vomiting are sometimes present; the countenance also turns pale, and the skin is hard and dry. If the disease continues for any great length of time, general emaciation, dropsy of the lower extremities, and relaxation of every part ensue, together with great loss of strength.

When this complaint to any great degree affects pregnant women, it may generally be considered as attended with danger.

Diarrhœa may be known from dysentery, by the latter disease being characterised by fever and inflammation, by a desire to go to stool without the power of producing

evacuations, or if any are produced, consisting of blood and purulent matter, with the occasional passage of hardened balls of fœces, and severe griping pains in the bowels.

**MODE OF TREATMENT.**—This will, of course, very much depend on the particular causes inducing the disease; we will therefore point out, individually, the most common causes, and the treatment peculiar to each.

When the complaint is occasioned by an obstructed perspiration, in consequence of exposure to cold, nauseating doses of ipecacuanha, or some antimonial preparation, as James's powder, or a simple solution of tartar emetic, given as already repeatedly advised, will be found of great advantage. The patient should, at night, bathe his feet in warm water, wear flannel next to his skin, and use every other means to restore the perspiration.

In a diarrhœa which proceeds from excess or repletion, a vomit is the proper medicine. Emetics not only cleanse the stomach, but promote all the secretions, which renders them of great consequence in carrying off the effects of a debauch. Twenty-five or thirty grains of ipecacuanha, followed on the succeeding morning by some gentle purge, as rhubarb, will often be sufficient. If the looseness continues, the purge may be repeated if necessary two or three times. The patient ought to live on light vegetable food of easy digestion, and to drink whey, thin gruel, or barley water.

A looseness occasioned by the obstruction of any customary evacuation, generally requires bleeding. If that does not succeed, other evacuations may be substituted in the room of those which are obstructed. At the same time, every method is to be taken to restore the usual discharges, as not only the cure of the disease, but the patient's life, may depend on this.

A periodical looseness ought never to be stopped; it is always an effort of nature to carry off some offending matter, which, if retained in the body, might produce fatal effects. Children are very liable to this kind of looseness, especially while teething. It is, however, so far



from being hurtful to them, that such children generally get their teeth with least trouble. If these loose stools should at any time prove acrid or griping, a tea spoonful of magnesia, with four or five grains of rhubarb, may be given to the child in a little panado, or any other food. This, if repeated three or four times, will generally correct the acidity, and carry off the griping stools.

A looseness which proceeds from violent passions or affections of the mind, must be treated with the greatest caution. Vomits in this case are highly improper. Nor are purges safe, unless they be very mild, and given in small doses. Opiates, and other antispasmodic medicines are most proper. Ten or twelve drops of laudanum may be taken in a cup of sage or penny-royal tea, every eight or ten hours, until the symptoms abate. Ease, cheerfulness, and tranquillity of mind, are here of the greatest importance.

The diarrhœa which sometimes attends on dentition, should never be checked, unless it prevails in so high a degree as to prove hurtful to the child; in which case four or five grains of toasted rhubarb, with about eight or ten of prepared chalk or magnesia may be given. This, if repeated three or four times, will generally correct the acidity, and put a stop to the griping stools.

Should the purging frequently return during dentition, or upon the striking in of any eruption, it will be useful to procure a running behind the ears by applying blisters to the part, and dressing the surface with strong basilicon ointment. A pitch plaster may also be applied between the shoulder blades.

When a looseness proceeds from acrid or poisonous substances, taken into the stomach, after an emetic and purgatives have been administered, the patient must drink large quantities of diluting liquors, barley water, &c. to promote vomiting and purging. Afterwards, if there be reason to suspect that the bowels are inflamed, bleeding will be necessary. Small doses of laudanum may likewise be taken to remove the irritation.

When the gout, repelled from the extremities, occasions a looseness, it ought to be promoted by gentle doses of rhubarb, or other mild purgatives. The gouty

affection is likewise to be solicited towards the extremities by warm fomentations, cataplasms, or blisters. The perspiration ought at the same time to be promoted by drinking plentifully of wine-whey in combination with a few drops of laudanum.

When a looseness proceeds from worms, which may be known from the sliminess of the stools, occasionally mixed with pieces of decayed worms, medicines must be given to carry off these animals; as the filings of tin, with purges of rhubarb and calomel. Afterwards lime water, either alone, or with a small quantity of rhubarb will be proper to strengthen the bowels, and prevent the new generation of worms.

A looseness is often occasioned by drinking bad water. When this is the case, the disease generally proves epidemical. When there is reason to believe that this, or any other disease proceeds from the use of unwholesome water, it ought immediately to be changed, or if that cannot be done, it may be corrected by mixing with it quick-lime, chalk, or the like.

In people whose stomachs are weak, violent exercise immediately after eating, will occasion a looseness. The cause of this is obvious; yet it will be proper, besides avoiding violent exercise, to use such medicines as tend to brace and strengthen the stomach, as infusions of the bark, with other bitter and astringent ingredients, in good claret or Maderia wine. Such persons ought likewise to take frequently, a glass or two of old port or good claret.

After every astringent and tonic medicine has failed in the long continued diarrhœa of warm climates, a voyage to sea has sometimes entirely removed the complaint.

From whatever cause a looseness proceeds, when it is found necessary to check it, the diet ought to consist of rice boiled with milk, and flavoured with cinnamon; indian arrow root or sago, with port wine, and the lighter sorts of meat roasted, as veal, lamb, or chickens. The drink may be thin water-gruel, rice-water, or weak broth made from lean veal, mutton, or beef; chicken-broth will also answer.

Persons, who from a peculiar weakness, or too great an irritability of the bowels, are liable to frequent returns of this disease, should live temperately, avoiding crude summer fruits, all unwholesome food, and meats of hard digestion. They ought likewise to beware of cold, moisture, or whatever may obstruct the perspiration, and should wear flannel next to their skin. All violent passions, as fear, anger, &c. are carefully to be guarded against.

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## OF VOMITING.

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VOMITING is a forcible ejection of food or any other substance from the stomach. It arises either from causes seated in the stomach, or from diseases in any other part of the body. Its immediate cause is a spasmodic, convulsive contraction of the stomach, and pressure of the diaphragm, (that muscle which separates the cavity of the chest from the belly,) and abdominal muscles. It is in fact, an effort of nature to expel whatever molests or is troublesome to the stomach.

CAUSES.—Vomiting may proceed from various causes; as excess in eating and drinking; foulness of the stomach; improper aliment; a transition of the gout, the erysipelas, or other diseases, to the stomach. It may likewise proceed from a looseness having been too suddenly stopped; from the stoppage of any customary evacuation, as the bleeding piles, the menses, &c. from a weakness of the stomach, the colic, inflammation of the intestines, a rupture, a fit of the gravel, worms; or from

any kind of poison taken into the stomach. It is an usual symptom of injuries done to the brain; as contusions, compressions, &c. It is likewise a symptom of wounds or inflammations of the diaphragm, intestines, spleen, liver, or kidneys, &c.

Vomiting may be occasioned by unusual motions; as sailing, being drawn backwards in a cart or coach, &c. by violent passions, or by the idea of nauseous or disagreeable objects, especially of such things as have formerly produced vomiting. Sometimes it proceeds from a regurgitation of the bile into the stomach: in this case, what the patient vomits, is generally of a yellow or greenish colour, and has a bitter taste. Persons who are subject to nervous affections, are often suddenly seized with violent fits of vomiting. Lastly, vomiting is a common symptom of pregnancy. In this case, it generally comes on about two weeks after the stoppage of the menses, and continues during the first three or four months.

When vomiting proceeds from a foul stomach or indigestion, it is not a disease, but the cure of a disease. It ought therefore to be promoted by drinking lukewarm water, or thin gruel. If this does not put a stop to the vomiting, a dose of ipecacuanha may be taken, and worked off with warm chamomile tea.

When the retrocession of the gout, or the obstruction of customary evacuations occasions vomiting, all means must be used by fomentations, cataplasms, blisters, &c. to bring the gout to the place from which it has receded, and to restore these discharges; or, if that cannot be effected, their place must be supplied by others, as bleeding, purging, bathing the extremities in warm water, opening issues, setons, perpetual blisters, &c.

When vomiting is the effect of pregnancy, it may generally be mitigated by bleeding, and keeping the body gently open. The bleeding, however, ought to be in small quantities at a time, and the purgatives should be of the mildest kind, as figs, stewed prunes, manna, or senna. Pregnant women are most apt to vomit in the morning, immediately after getting out of bed, which is owing partly to the change of posture, but more to the



emptiness of the stomach. It may generally be prevented by taking a dish of coffee, tea, or some light breakfast in bed. Pregnant women who are afflicted with vomiting, ought to be kept easy both in body and mind. They should neither allow their stomachs to be quite empty, nor should they eat much at once. Cold water is a very proper drink in this case; if the stomach be weak, a little brandy may be added to it. If the spirits are low, and the person apt to faint, a spoonful of cinnamon water, with a little conserve of quinces may be taken.

If vomiting proceeds from weakness of the stomach, bitters will be of service. Bark infused in wine or brandy, with as much rhubarb as will keep the body gently open, is an excellent medicine in this case. The elixir of vitriol is also good. It may be taken in the dose of fifteen or twenty drops, twice or three times a day in a glass of wine or water.

A vomiting which proceeds from acidities in the stomach, is relieved by alkaline purges. The best medicine of this kind is magnesia, a tea spoonful of which may be taken in a little milk three or four times a day, or oftener if necessary, to keep the bowels open.

When vomiting proceeds from violent passions, or affections of the mind, all evacuations must be carefully avoided, especially vomits. These are here exceedingly dangerous. The patient, in this case, ought to be kept perfectly easy and quiet, to have the mind soothed, and to take some gentle cordial: as good wine, or a little brandy and water, to which a few drops of laudanum may occasionally be added.

When vomiting proceeds from spasmodic affections of the stomach, musk, castor, and other antispasmodic medicines are of use. Warm and aromatic applications, as the spice plaster mentioned in the Dispensatory, have likewise a good effect, when applied to the pit of the stomach. Aromatic medicines may also be taken internally; such as cinnamon water, mint tea, or wine, with spices boiled in it. The region of the stomach may be rubbed with ether, or, if that cannot be had, with strong brandy, or other spirits. The belly should be fomented

with warm water, or, when practicable, the patient immersed up to the breast in a warm bath.

The saline draughts taken in the act of effervescence are of singular use in stopping a vomiting, from whatever cause it may have arisen. These may be prepared by dissolving a dram of the salt of tarter, (see Dispensatory,) in an ounce and a half of fresh lemon juice, adding to it an ounce of peppermint water, the same quantity of simple cinnamon water, and a little white sugar. This draught must be swallowed before the effervescence is quite over, and may be repeated every two hours, or oftener, if the vomiting be violent. A violent vomiting has sometimes been stopped by blistering the region of the stomach, after all other means had failed.

As the least motion will often renew the vomiting after it has been stopped, the patient must be kept perfectly quiet. The diet should be so regulated as to sit easy upon the stomach, and nothing should be taken that is hard of digestion. The patient should not live entirely upon fluids, as solids often agree with the stomach better.

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## INFLAMMATION OF THE KIDNEYS.

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INFLAMMATION of the kidneys may very properly be divided into two kinds: one resulting from the general causes of inflammation, the other arising from irritation in the cavity of the kidneys. In the first form, the external membrane is inflamed, in the second, the inflammation has its seat in the interior parts of the organ.

**CAUSES.**—This disease may proceed from any of those causes which produce an inflammatory fever. It may likewise be occasioned by wounds or bruises of the kidneys; small stones or gravel lodging within them; by strong diuretic medicines, as spirits of turpentine, tincture of cantharides, &c.: violent motion, as hard riding or walking, especially in hot weather; or whatever drives the blood too forcibly into the kidneys, may occasion this complaint.

**SYMPTOMS.**—There is generally a sharp pain about the region of the kidneys, with some degree of fever, and a heavy dull pain in the thigh of the affected side. The urine, at first, is mostly clear, and afterwards of a reddish colour; but in the worst form of the disease, it is generally pale during the continuance of the complaint, is passed with difficulty, and commonly in small quantities at a time. The patient feels great uneasiness when he endeavours to walk, or sit upright; he lies with most ease on the affected side, and has frequently a nausea or vomiting resembling that in the colic.

This disease may be distinguished from the colic, by the pain being seated further back, and by the difficulty of passing urine, with which it is constantly attended.

**MODE OF TREATMENT.**—Bleeding is generally necessary from the beginning. Ten or twelve ounces may be drawn from the arm with a lancet, and if the pain and inflammation continue, the operation should be repeated, especially if the patient be of a full habit. Leeches may be applied to the hæmorrhoidal veins, as a discharge from these will greatly relieve the patient.

Cloths dipped in warm water, or bladders filled with it, must be applied as near as possible to the part affected, and renewed as they grow cool; or the patient may go into the warm bath, which is much more efficacious.

Emollient clysters ought frequently to be administered, and if these do not open the bowels, a little salt and honey, or manna may be added to them.

The same course is to be followed where gravel or stones are lodged in the kidneys; but when the gravel or

stones are separated from the kidneys, and obstructed in their passage through the ureters,\* it will be proper, besides the fomentations, to rub the small of the back with sweet oil, and to give gentle diuretics, as juniper water sweetened. A tea spoonful of the sweet spirits of nitre, with fifteen drops of laudanum, may be given every three or four hours until the pain is mitigated, in a cup of the patient's drink. He ought likewise to take exercise on horseback, or in a carriage, if he is able to bear it.

When the disease is protracted beyond the seventh or eighth day, and the patient complains of a heaviness of the part, has frequent returns of chilliness, shivering, &c. there is reason to suspect that matter is forming in the kidney, and that an abscess will ensue.

When matter in the urine shows that an ulcer is already formed in the kidney, the patient must be careful to abstain from all acrid, sour, and salted provisions, and to live chiefly upon mild mucilaginous herbs and fruits, together with the broth of young animals, made with barley and common pot-herbs. His drink may be whey and butter-milk that is not sour. The latter is by some reckoned a specific remedy in ulcers of the kidneys. To answer this character, however, it must be drank for a considerable time. Chalybeate waters have likewise been found beneficial in this disease.

Every thing of a heating or stimulating nature is to be avoided. The food must be thin and light, as panado, weak broths, mild vegetables, and the like. Emollient and thin liquors must be plentifully drank, as clear whey, balm-tea sweetened with honey, or decoctions of barley and liquorice. The patient, notwithstanding the vomiting, must continue sipping small quantities of these or other diluting liquors. Nothing so safely and certainly abates the inflammation, and expels the obstructing cause, as copious dilution. The patient must keep easy, quiet, and free from cold, so long as any symptoms of inflammation remain.

\* The ureters are two long and small canals, one on each side, which carry the urine from the basin of the kidneys to the bladder. They are sometimes obstructed by small stones or gravel falling down from the kidneys and lodging in them.



Those liable to frequent returns of inflammation or obstruction of the kidneys, must abstain from wines, especially such as contain much acidity; their food ought to be light and of easy digestion. They should use moderate exercise, and should not keep too warm, or too much on the back.

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## INFLAMMATION OF THE BLADDER.

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THIS complaint proceeds, in a great measure, from the same causes as inflammation of the kidneys. It is known by an acute pain towards the bottom of the belly, difficulty of passing urine, with occasionally a severe pain in the lower part of the back, by some degree of fever, by constant inclination to go to stool, and by a perpetual desire to make water.

This disease must be treated on the same principles as the preceding. The diet must be light and thin, and the drink of a cooling nature. Bleeding is very proper in the beginning, and in robust constitutions it will often be necessary to repeat it. The lower part of the belly should be fomented with warm water, or a decoction of mild vegetables; and emollient clysters ought frequently to be administered.

The patient should abstain from every thing that is of a stimulating quality, and should live entirely upon weak broths, gruels, or mild vegetables.

A stoppage of urine may proceed from other causes besides an inflammation of the bladder, such as hard fæces lodged in the lower part of the intestines, excrescences in the urinary passages, a palsy of the bladder, hysteric.

affections, &c. Each of these require a particular treatment, which does not fall under our present consideration; in all of them, however, mild and gentle applications are the safest, as strong diuretic medicines, and all things of an irritating nature, generally increase the danger. Some persons greatly injure themselves by introducing probes into the urinary passages, to remove, as they think, something obstructing the discharge of urine; and others bring on a violent inflammation of the bladder, by using strong diuretics, as spirits of turpentine, &c. for that purpose.

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## OF AN INORDINATE FLOW OF URINE.

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THIS disease is rare among young people; but often attacks persons in the decline of life, especially such as follow the more active employments, or have at any period been hard drinkers.

**CAUSES.**—This complaint is often the consequence of other diseases, such as fevers, and fluxes; it is also sometimes observed, where the patient has suffered from excessive evacuations, or great fatigue, as riding long journeys on a hard trotting horse, carrying heavy burdens, running, &c. It may likewise be induced by hard drinking, or the use of strong stimulating diuretic medicines, as the tincture of cantharides and spirits of turpentine, or by drinking too great quantities of the mineral waters. Individuals resorting to watering places, suppose that benefit can only be procured by drinking

excessive quantities; but by this they often occasion more serious diseases than those they attempt to cure.

**SYMPTOMS.**—Weakness and disinclination to motion or exertion, with dryness and harshness of the skin, costiveness, great thirst, a voracious appetite, accompanied by a defect in the powers of digestion, gradual wasting of the whole body, very frequent discharges of urine, containing a large proportion of matter of a sweetish taste, voided in a quantity equal, if not greater than that of the fluids received into the stomach, are the characteristics of the disease.

This complaint, if properly treated at its commencement, may sometimes be cured; but the further it advances, the difficulties of its removal gradually increase, until finally the prospect of its removal is entirely lost. These difficulties more especially prevail in persons advanced in life, or in those whose constitutions have been impaired by excessive drinking, or indeed by any other debilitating agent.

A diminution of thirst, more natural appetite, the skin becoming moist, the bowels rather more open than natural, a return of strength, the discharges of urine becoming less frequent and small in quantity, and at the same time more natural in colour and smell, are all to be regarded as happy circumstances: an aggravation of the above symptoms, however, indicates an unfavourable termination.

**MODE OF TREATMENT.**—In the cure of this disease, it will be proper to commence with a gentle emetic, that the stomach may be relieved of any thing that is inconsistent with its healthy functions. Ipecacuanha is the medicine best calculated for this purpose; it may be taken in doses of from twenty to thirty grains, to be repeated occasionally throughout the disease.

A gentle purge, if the patient be not too much weakened by the disease, will often be found necessary.—Rhubarb alone, or in combination with magnesia, may very properly be used.

With the view of diminishing the increased flow of

urine, it may be necessary to divert the fluids from the internal parts to the surface of the body; and to effect this object, perspiration should be induced, by the addition of warm clothing, the occasional use of the warm bath, and the exhibition of diaphoretic medicines, such as tartar emetic and ipecacuanha, in small nauseating doses, combined with a proportion of opium. With the same view, a blister may be applied over each kidney in succession, and kept in a discharging state, by dressing the part daily with Spanish fly, strong basilicon or savin ointment.

As this complaint depends primarily upon a diseased action of the digestive organs, and an inability of the system to assimilate the nourishment taken in to itself, it will be necessary to invigorate the constitution by the exhibition of such tonics as the Peruvian bark given in lime water, myrrh, and the preparations of iron, together with cold bathing, when the season of the year will admit of it.

To aid in restoring tone to the affected parts, astringents also have been found of essential service. Those which experience has discovered to be most efficacious, are alum, white vitriol, gum kino, catechu, (*see Dispensatory.*) Of these articles, a combination of the first two, in the proportions of twelve grains of alum to two of white vitriol, given three times a day, will probably prove more effectual than any of the other astringents; to each dose a half grain of opium may be added. This recipe has been found capable of exerting considerable influence over the morbid secretions of the kidneys in this disorder.

As acidity seems to predominate in the stomach, medicines calculated to overcome this evil, are brought into requisition. Water strongly impregnated with soda, or lime water combined with equal proportions of milk, in which a little gum arabic has been dissolved, will prove highly serviceable.

To assist in the means of cure already proposed, easy exercise on horseback, so gentle as not to cause fatigue, together with the flesh-brush over the region of



the kidneys when not in a blistered state, ought to be used.

Warm clothing should be worn next to the skin, and all exposures to cold most strictly avoided; for any thing having a tendency to obstruct perspiration must necessarily determine a large quantity of fluid to the kidneys.

As it respects the diet, Sydenham first proposed, (and his sentiments have since been supported by the ablest writers,) the use of animal food, and abstinence from all vegetables and fruits. The meats to be preferred are those of the easiest digestion.

The thirst may be quenched by the moderate use of the nitric or sulphuric acids largely diluted, or of vinegar or lemon juice.

To give support, a large plaster of Burgundy pitch may be applied to the loins.

There is another disease incident to labouring people in the decline of life, called an *Incontinency of Urine*, which, by a superficial observer, might possibly be confounded with the complaint we have just been considering. But they are essentially different: for in incontinency of urine, the water passes off involuntarily by drops, and does not exceed the quantity usually evacuated in time of health.

This complaint is rather troublesome than dangerous. It is owing to a relaxation of that muscle called the sphincter, which acts as a valve to the bladder.

Palsy, stony concretions, irritating the neck of the bladder, pressure of the womb during pregnancy, injuries of the spine, long continued use of diuretics, excess in venereal indulgence, and sometimes fever, are the causes of this complaint.

The treatment of this form of disease depends much on the exciting cause. If it arises from stone in the bladder, that should be removed by a proper operation; when depending on pregnancy, the effect will cease with the natural removal of the cause. When however, it arises from relaxation of the sphincter of the bladder, the cure must depend upon tone being communicated

to the part affected. Here the tonic plan should be pursued: Peruvian bark, steel, and columbo, with the general and local application of the cold bath, will all be found highly serviceable.

The tincture of cantharides in doses of ten or twelve drops every three or four hours, is said by Dr. Morton to be a specific in this complaint. Others recommend alum whey; this is made by boiling a quantity of milk and adding to it a proportion of alum suited to the nature of the case. Here it should be given as strong as the stomach can bear it.

A blister applied to the lowermost part of the back will often be found of essential service.

The occasional use of rhubarb in small doses, to keep the bowels open, tends greatly to alleviate the affection.

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## OF A SUPPRESSION OF URINE.

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A SUPPRESSION of urine may proceed from various causes, as an inflammation of the kidneys, or bladder, small stones or gravel lodging in the urinary passages, hard fæces lying in the lower part of the intestines, pregnancy, a spasm or contraction of the neck of the bladder, clotted blood in the bladder itself, a swelling of the hæmorrhoidal veins, &c.

Some of these cases require the catheter, both to remove obstructing matter, and to draw off the urine: but as this instrument can only be managed with safety by those who understand the structure of the parts, we shall here say nothing further of its use. A bougie may be used by any cautious hand, and will often succeed

better than the catheter. We chiefly recommend in all obstructions of urine, fomentations and evacuants. Bleeding as far as the patient's strength will permit, is sometimes necessary, especially where there are symptoms of topical inflammation. Bleeding in this case not only abates the fever, by lessening the force of the circulation, but, by relaxing the solids, it takes off the spasm or stricture which probably occasioned the obstruction.

After bleeding, fomentations must be used. These may either consist of warm water alone, or of decoctions of mild vegetables as hops, chamomile flowers, &c. Cloths dipped in these may either be applied to the part affected, or a large bladder filled with the decoction may be kept continually upon it. Some put the herbs themselves into a flannel bag, and apply them to the part, which is far from being a bad method. These continue longer warm than cloths wrung out of the decoction, and at the same time keep the part equally moist.

In all obstructions of urine, the bowels ought to be kept open. This is not however, to be attempted by strong purgatives, but by mild clysters, or gentle infusions of senna and manna. Clysters in this case, not only open the body, but answer the purpose of an internal fomentation, and greatly assist in removing the spasms of the bladder and parts adjacent.

When the bowels have been freely opened, emollient clysters have the most happy effect. These should be injected every two or three hours, with one or two drams of laudanum in each.

The food must be light, and taken in small quantities. The drink may be weak broth, or decoctions and infusions of mucilaginous vegetables, as flaxseed tea, barley water, or a solution of gum arabic. A tea spoonful of the sweet spirits of nitre, may be frequently put into the patient's drink.

Persons subject to a suppression of urine ought to live very temperately. Their diet should be light, and their drink diluting. They should avoid all acids and hard wines, should take sufficient exercise, lie hard, and avoid study and sedentary occupations.

## OF THE GRAVEL, OR STONE.

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WHEN small stones are lodged in the kidneys, or discharged along with the urine, the patient is said to be afflicted with the gravel. If one of these stones happens to make a lodgement in the bladder for some time, it accumulates fresh matter, and at length becomes too large to pass off with the urine. In this case the patient is said to have the stone.

**CAUSES.**—The stone and gravel may be occasioned by high living; the use of strong astringent wines; a sedentary life; lying too hot, soft, or too much on the back; the constant use of water impregnated with earthy or stony particles; aliments of an astringent or windy nature, &c. It may likewise proceed from an hereditary disposition. Persons in the decline of life, particularly those who have been much afflicted with the gout or rheumatism are liable to it, though the fact is well established that the period from infancy to twelve or fifteen years, is that most subject to the formation of stony concretions in the bladder.

**SYMPTOMS.**—Small stones or gravel in the kidneys occasion pain in the loins, sickness, vomiting; and sometimes bloody urine. When the stone descending into the ureter or tube passing from the kidney to the bladder, is too large to pass along with ease, all the above symptoms are increased; the pain extends towards the bladder; the thigh and leg of the affected side are benumbed; the testicles are drawn upwards, and the urine is obstructed.



A stone in the bladder is known from a pain, at the time, as well as before and after making water; from the urine coming away by drops, or stopping suddenly, when running in a full stream; by a violent pain in the neck of the bladder upon motion, especially on horse-back, or in a carriage on a rough road; from a white, thick, copious, mucous sediment in the urine; from an itching at the end of the penis; from bloody urine; from an inclination to go to stool during the discharge of urine; from the patient's passing his urine more easily when lying than in an erect posture; from a kind of convulsive motion occasioned by the sharp pain in discharging the last drops of the urine; and lastly, from sounding or searching with the catheter or metallic sound.

During the intervals between the attacks, where the stone is known certainly to exist in the bladder, it has been proposed by many able practitioners to inject a solvent solution through a catheter, two or three times a day. Experience, however, has proved that all attempts, either by injection, or by medicines given by the mouth, to dissolve such concretions in the bladder, have failed, although they may have prevented, in some degree, an increase in the size of the stone, by counteracting the acid or alkaline properties predominating in the system.

When the concretions are of an acid character, the alkalies as soda, potash, lime water, &c are adviseable. A solution of caustic potash, which is a powerful alkali, may perhaps, be preferred to the others. It should be given in doses of twenty drops, twice or three times a day in any mucilaginous liquor.

Soap pills have also been recommended, to be washed down with lime water, diluted with an equal quantity of milk.

Where the stony concretions are satisfactorily discovered to possess the alkaline properties, the proper medicines will be the mineral acids, of which the muriatic is to be preferred. This may be given in doses of twenty drops, gradually increased to thirty, three or four times a day, sufficiently diluted with water.

Dr. Buchan, in speaking of the *uva ursi*, (see Dispensatory,) as administered in this disease, says, "that it

has been greatly extolled of late, both for the gravel and stone." It seems, however, to be in all respects inferior to the soap and lime water; but it is less disagreeable, and has frequently relieved gravelly complaints. It is generally taken in powder, from half a dram to a dram, two or three times a day. It may, however, be taken to the quantity of seven or eight drams a day, with great safety, and good effect.

Persons afflicted with the gravel or stone should avoid food of a windy or heating nature, as salt meats, sour fruits, &c. Their diet ought chiefly to consist of such things as promote the secretion of urine, and keep the body open. Asparagus, spinnage, lettuce, parsley, turnips, potatoes, carrots, and radishes, may be safely eaten. Onions, leeks, and celery, are, in this case, reckoned medicinal. The most proper drinks are whey, buttermilk, milk and water, barley-water; decoctions or infusions of the roots of parsley, liquorice, or of other mild mucilaginous vegetables, as flaxseed. If the patient has been accustomed to generous liquors, he may drink gin and water, but not very strong.

Gentle exercise is proper; but violent motion is apt to occasion bloody urine. We advise that it should be taken in moderation. Persons afflicted with gravel, often pass a great number of small stones after riding on horseback, or in a carriage; but those who have a stone in the bladder, are seldom able to bear these kinds of exercise. Where there is a hereditary tendency to this disease, a sedentary life ought never to be indulged. Were people careful upon the first symptoms of gravel to observe a proper diet, and to take sufficient exercise, it might often be carried off, or at least prevented from increasing; but if the same course which occasioned the disease is persisted in, it will be aggravated.

**MODE OF TREATMENT.**—In what is called a fit of the gravel, which is commonly occasioned by a stone being obstructed in the ureter or some part of the urinary passages, the patient must be bled, warm fomentations should likewise be applied to the part affected, emollient anodyne clysters administered, and thin mucilaginous

liquors drank, such as flaxseed tea; barley water, &c. If the bowels are bound, a dose of castor oil should be given.

Where this plan of treatment, as is too often the case, fails of relieving this distressing complaint, and the stone increases in size until it cannot possibly pass the male urethra or urinary passage, it will be necessary to resort for its removal, to an operation, for information on which subject, we refer our readers to those works which are professedly surgical.

In females, stones of considerable size may be extracted from the bladder by gradually distending the urethra, by means of a bougie or sponge tent, which should be daily enlarged until the canal has become sufficiently distended to admit the introduction of a pair of extracting forceps through it into the bladder.

This is a very great advantage in favour of females, for if the practitioner were judicious and timely in his treatment, there would rarely, in that interesting class of society, be a necessity for an operation, so distressing in its character, and often so fatal in its results, as that to which so many of our fellow citizens become liable, from labouring under this complaint.

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## OF THE SMALL POX.

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THIS disease, which originally came from Arabia, is now become so general, that very few escape it at some time of life, unless they have experienced the influence of the cow-pox. It is a contagious malady, and has, for many years, proved a scourge to the world.

The small pox generally appears in the spring. It is

very frequent in summer, less so in autumn, and least of all in winter. Children are most liable to this disease.

It is divided into the distinct and confluent kinds, the latter of which is always attended with danger.

**CAUSES.**—The small pox is caught by infection. Since the disease was first brought into America, the infection has never been wholly extinguished, nor have any effectual methods been generally taken for that purpose.

**SYMPTOMS.**—This disease is so generally known, that a minute description of it is unnecessary. Children commonly look a little dull, seem listless and drowsy for a few days before the more violent symptoms appear. They are likewise more inclined to drink than usual, have little appetite for solid food, complain of weariness, and, upon taking exercise, are apt to sweat. These symptoms are succeeded by slight fits of cold and heat by turns, which, as the time of the eruption approaches, become more violent, and are accompanied with pains of the head and loins, and vomiting. The pulse is quick, with great heat of the skin, and restlessness. When the patient drops asleep, he wakes in a kind of horror, with a sudden start, which is a very common symptom of the approaching eruption; as are also convulsion-fits in young children. We may remark, however, that all feverish symptoms of small pox are greatly relieved by walking about in the cool air, and that they often intermit.

About the third or fourth day from the time of sickening, the small-pox generally begins to appear; sometimes indeed, sooner. At first the external eruption very nearly resembles flea bites, and is soonest discovered on the face, arms, and breast.

The most favourable symptoms are slow eruption, and an abatement of the fever as soon as the pustules appear. In a mild distinct kind of small-pox, the pustules seldom appear before the third or fourth day from the time of sickening, and they generally keep coming out gradually for several days after. Pustules which are distinct, with a florid red basis, and which fill with thick purulent matter, are the best.



A livid brown colour of the pustules is an unfavourable symptom; especially when they are small and flat, with black specks in the middle. Pustules which contain a thin watery fluid are very bad. A great number of pustules on the face is always attended with danger. It is likewise an unfavourable sign when they run into one another.

It is a most unpleasant symptom when purple, brown, or black spots are interspersed among the pustules. Bloody stools with a swelled belly, are bad symptoms; as is also a difficulty in passing urine. Pale urine, and a violent throbbing of the arteries of the neck, are signs of an approaching delirium, or of convulsion-fits. When the face does not swell, or falls before the pustules come to maturity, it is unfavourable. If the countenance begins to fall about the eleventh or twelfth day, and at the same time the hands and feet begin to swell, the patient generally does well; but when these do not succeed to each other, there is reason to apprehend danger. A continual spitting is favourable. When the tongue is covered with a brown crust, it is an unfavourable symptom. Grinding of the teeth is a bad sign; but sometimes this is occasioned by worms.

When convulsions appear, they give a dreadful alarm; immediately some nostrum is applied, as if this were a primary disease; whereas it is often only a symptom of the approaching eruption. As the fits generally go off before the actual appearance of the small-pox, this is frequently attributed to some medicine which acquires a reputation without possessing any merit.\*

All that is generally necessary during the eruptive fever, is to keep the patient cool and easy, allowing him to drink freely of some weak diluting liquors: as balm tea, barley water or gruels. He should not be confined to bed, but ought to sit up and go into cool air, with precaution, occasionally. The food ought to be very light—the patient should be as little disturbed with company as possible.

\* Convulsion-fits are no doubt very alarming, but their effects are often salutary. They seem to be one of the means made use of by nature, for breaking the force of the fever.

Every thing that heats and inflames the blood, increases the fever, and pushes out the pustules prematurely. This has many ill effects: it not only increases the number of pustules, but likewise tends to make them run into one another; and when they have been pushed out with too great violence, they generally sink before they come to maturity.

The good women, as soon as they see the small-pox begin to appear, commonly ply the patient with cordials, wine, punch, and even brandy itself. All these are given with a view, as they term it, to throw out the eruption from the heart. This, like most other popular mistakes, is the abuse of a very just observation, *that when there is a moisture on the skin the pustules rise better, and the patient is easier than when it continues dry and parched.* But that is no reason for forcing the patient into a sweat. Sweating never relieves unless where it comes on spontaneously, or is the effect of drinking weak diluting liquors.

“I have never seen” says Dr. BUCHAN, “a case in which convulsions, preceding the eruption, were fatal. If the fever is high, exposure to cool air; if the feet are very cold, the warm bath; if the pulse requires it, bleeding; also emetics and anodynes are amongst the most useful remedies.

Laying several children who have the small-pox in the same bed has many ill consequences. They ought, if possible, never to be in the same chamber, as the perspiration, the heat, the smell, &c. all tend to augment the fever, and to heighten the disease.

A patient should not be suffered to be dirty in an internal disease, far less in the small-pox. Cutaneous disorders are often occasioned by uncleanness alone, and are always increased by it. Were the patient's linen to be changed every day, it would greatly refresh him. Care indeed is to be taken that the linen be thoroughly dry when used. It ought likewise to be put on when the patient is most cool, and should be soft, without any starch in it.

The food in this disease ought to be very light, and of a cooling nature: such as panado, or bread boiled with

equal quantities of milk and water, good apples roasted or boiled with milk, and sweetened with a little sugar, or some similar article.

The drink may be toast and water, clear sweet whey, barley water, or thin gruel. After the pustules become full, butter milk, being of an opening and cleansing nature, is a very proper drink, or wine whey if the patient be low.

**MODE OF TREATMENT.**—It has already been observed, that little more is necessary during the primary fever than to keep the patient cool and quiet, and allowing him to drink moderately of diluting liquors. Though this is generally the safest course that can be taken with infants, yet adults of a strong constitution and plethoric habit, generally require bleeding. When a full pulse, a dry skin, and other symptoms of inflammation render this operation necessary, it ought to be performed; if the body is bound, purges must be given of epsom salts, or calomel joined with rhubarb.

If there is a great nausea or inclination to vomit, weak chamomile tea, or luke-warm water may be drank, or a dose of ipecacuanha may be given, in order to cleanse the stomach.

Though every method is to be taken during the fever, by a cool regimen, to prevent too great an eruption; yet after the pustules have made their appearance, our business is to promote the suppuration, by diluting drink, light food, and *if nature seems to flag*, by generous cordials. When a low, creeping pulse, faintness, and great loss of strength render cordials necessary, we would recommend good wine, with an equal quantity of water, and sharpened with the juice of orange, the jelly of currants, or some similar acid. Wine whey, sharpened as above, is likewise a proper drink in this case; great care, however, must be taken not to overheat the patient by any of these things. This, instead of promoting, would retard the eruption.

Excessive restlessness often prevents the rising and filling of the small-pox. When this happens, gentle

opiates are necessary. These, however, ought always to be administered with a sparing hand.

Nothing more certainly relieves the patient, or is more beneficial in the small-pox, than a plentiful discharge of urine; this can generally be procured by the use of sweet spirits of nitre, a tea spoonful of which in a little water may be taken every hour.

If the mouth be foul, and the tongue dry, it ought to be frequently washed, and the throat should be gargled with sage tea and honey, sharpened with a little vinegar or currant jelly.

During the rising of the small-pox, it frequently happens that the patient is several days without a stool. This tends to heat and inflame the blood; it will therefore be proper, when the body is bound, to throw in an emollient clyster every day, through the whole course of the disease.

When purple, black, or livid spots appear among the pustules, the Peruvian bark must immediately be administered in as large doses as the patient's stomach can bear. For a child, two drams of the bark in powder may be mixed in three ounces of common water, and one ounce of simple cinnamon water. This may be sharpened with elixir of vitriol, and a table spoonful of it given every hour. If it be given to an adult in the same form, he may take at least three or four table spoons full every hour. This medicine ought not to be trifled with, but must be administered as frequently as the stomach can bear it, in which case it will often produce very happy effects. "I have frequently seen," says Doctor Buchan, "the spots disappear, and the small-pox, which had a very threatening aspect, rise and fill with good matter, by the use of the bark and acids."

The patient's drink ought likewise in this case to be generous. The food must consist of roasted apples, preserved cherries, plums, and other fruits of an acid nature.

The bark and acids are necessary, also, where the matter is thin, and not duly prepared. The Peruvian bark, is supposed by many, to possess a singular power of assisting nature in preparing laudable pus, or what is called good matter; and therefore is considered to be



beneficial both in this and other diseases, where the crisis depends on a suppuration.

When the eruption subsides suddenly, or as it is termed, when the small-pox *strikes in*, before it has arrived at maturity, the danger is great. In this case blistering-plasters must be immediately applied to the wrists and ancles, and the patient supported with cordials.

Sometimes bleeding has an effect in raising the pustules after they have subsided; but it requires skill to know when this is proper, or to what length the patient can bear it.\* Strong mustard plasters, however, if the pulse is weak, should be applied to the feet and hands.

The most dangerous period of this disease is during the secondary fever. Most of those who die of the small-pox are carried off at this time.

Nature often attempts, at the crisis of the small-pox, to relieve the patient by loose stools, especially in children. Her endeavours this way are by no means to be counteracted, but promoted; and the patient, at the same time, should be supported by food and drink of a nourishing and cordial nature.

If, at the approach of the secondary fever, the pulse be very quick, hard, and strong, the heat intense, and the breathing laborious, with other symptoms of an inflammation of the breast, the patient must immediately be bled. The quantity of blood taken must be regulated by the patient's strength, age, and the urgency of the symptoms.

But, in the secondary fever, if the patient be faint, the pustules become suddenly pale, and if there is great coldness of the extremities, blistering plasters must be applied, and the patient must be supported with generous cordials. Wine is often given, in such cases, with great success.

Doctor Buchan recommends opening the pustules with a lancet or needle, when they become ripe, especially on the face if they are numerous.

\* It is proper, when the pulse is hard, whether high or low, but never when the pulse is weak or soft.

It is generally necessary, after the disease has abated, to purge the patient. If, however, the body has been open through the whole course of the disease, or if butter milk and other things of an opening nature, have been drank freely, purging becomes less necessary; but it ought never wholly to be neglected.

For very young children, an infusion of senna may be sweetened with coarse sugar, and given in small quantities until it operates. Children further advanced, and adults, should take more powerful medicine.

When a cough, a difficulty of breathing, or other symptoms of a consumption, succeed to the small-pox, the patient must be sent to a place where the air is good, and put upon a milk diet, with such exercise as he can bear. For further directions in this case, see the article *Consumption*.

It is to be regretted that the small-pox should be suffered to exist among us, when an almost sure preventive may be easily resorted to by every individual. With regard to the comparative merits of what are commonly termed inoculation and vaccination, we will quote some remarks under the head of the "*vaccine disease*."

The small-pox, we believe, might possibly be exterminated, if energetic measures were used for the purpose: very few instances indeed, and according to Mr. John Cross, member of the Royal College of Surgeons, in England, not more, on an average, than one in ten thousand have occurred after vaccination. No greater proportion of benefit, he supposes, can be consequent to inoculation; and as the practice of inoculation for the small-pox tends to diffuse an unnecessary calamity, it is therefore improper.

## OF THE VACCINE DISEASE.

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ON the subject of this disease, we have extracted so copiously from a book written some years since by Professor John Redman Coxe, of Philadelphia, that the original observations will be brief.

It is proper, remarks that gentleman, here to observe, that the preventive power of vaccine has long been known. This is not the discovery to which Dr. Jenner lays claim. He first experimentally proved, that the virus did not lose its specific property by being transferred from one human subject to another by inoculation; and to him therefore, is mankind indebted for the happy prospect it unfolds, of completely annihilating a disease, whose name alone must ever be remembered with horror.

When the important advantages of vaccination for small pox are more generally known and properly estimated, we may safely conclude, that the celebrated author of the discovery, will receive that universal homage he so richly deserves. The philanthropy he has evinced in communicating it immediately to the public, in place of converting it to his own private emolument, is worthy of the liberal profession, of which he was so bright an ornament; and whilst it raises him in the estimation of a grateful world, must certainly prove the strongest reproach to those, who by an opposite conduct, hope to serve themselves at the expense of suffering humanity.

Before we enter upon the consideration of this important disease, it will be necessary to take a brief view of

its origin. This shall be presented in the words of Dr. Jenner, who says:

“There is a disease, to which the horse, from his state of domestication, is frequently subject. The farriers have termed it the *Grease* (scratches.) It is an inflammation and swelling of the heel, accompanied at its commencement with small cracks or fissures, from which issues a limpid fluid, possessing properties of a very peculiar kind. This fluid seems capable of generating a disease in the human body, (after it has undergone the modification I shall presently speak of,) which bears so strong a resemblance to the small-pox, that I think it highly probable it may be a source of that disease.

“In this dairy-country a great number of cows are kept, and the office of milking is performed indiscriminately by men and maid-servants. One of the former having been appointed to apply dressings to the heels of a horse affected with the malady I have mentioned, and not paying due attention to cleanliness, incautiously bears his part in milking the cows, with some particles of the infectious matter adhering to his fingers. When this is the case, it frequently happens, that a disease is communicated to the cows, and from the cows to the dairy-maids, which spreads through the farm until most of the cattle and domestics feel its unpleasant consequences. This disease first obtained the name of *Cow-pox*: it is at present, however, termed the *Vaccine Disease*. It appears on the nipples of the cows in the form of irregular pustules. At their first appearance, they are commonly of a palish blue, or rather of a colour somewhat approaching to livid, and are surrounded by an inflammation. These pustules, unless a timely remedy be applied, frequently degenerate into ulcers, which prove extremely troublesome. The animals become indisposed, and the secretion of milk is much lessened.

“Inflamed spots now begin to appear on different parts of the hands of the domestics employed in milking, and sometimes on the wrists, which run on to suppuration, first assuming the appearance of the small vesications produced by a burn. Most commonly they appear about the joints of the fingers, and at their extremities; but



whatever parts are affected, if the situation will admit, these superficial suppurations put on a circular form with their edges more elevated than their centre, and of a colour distinctly approaching to blue. Absorption takes place, and tumours appear in each arm-pit. The system becomes affected, the pulse is quickened; shiverings, succeeded by heat, general lassitude, and pains about the loins and limbs, with vomiting, come on. The head is painful, and the patient is now and then even affected with delirium.

“These symptoms, varying in their degrees of violence, generally continue from one day to three or four, leaving ulcerated sores about the hands, which, from the sensibility of the parts, are very troublesome, and commonly heal slowly.

“During the progress of the disease, the lips, nostrils, eye-lids, and other parts of the body, are sometimes affected with sores; but these evidently arise from their being heedlessly rubbed or scratched with the patient's infected fingers. No eruptions on the skin have followed the decline of the feverish symptoms in any instance that has come under my inspection, one only excepted, and in this case a very few appeared on the arms; they were very minute, of a vivid red colour, and soon died away without advancing to maturation.

“Thus the disorder makes its progress from the horse, (as I conceive,) to the nipple of the cow, and from the cow to the human subject.”

We entertain but little doubt that the origin of this disease has been satisfactorily traced by the illustrious Jenner.

This disease, says Professor Coxe, as communicated by vaccination, in its commencement very much resembles the small pox. Towards the middle or close of the second day, when the operation takes effect, (that is, thirty-six to forty-eight hours from inserting the virus,) a slight speck of inflammation may generally be perceived: this becomes more conspicuous in the course of the third day, and in most instances, by the fourth, a minute pimple may be felt rising above the skin, and surrounded by a circular inflammation at its base. It now gradually in-

creases in size, and by the close of the fifth day begins to assume, (especially if viewed through a magnifying glass,) that appearance which so much distinguishes it from the small pox. This consists in the perfect regularity and beautifully circumscribed form of the pustule, which has a surface flattened, with a depressed centre, of a darker colour, so as to give an appearance of elevated edges. In the small pox on the contrary, by the sixth day, the inoculated part begins to assume an irregular, or angulated appearance, and its surface is not so flattened in proportion to its diameter. This circumscribed appearance is retained by the vaccine during its whole progress, even during the progress of scabbing, whilst the small pox becomes daily more irregular, in consequence of the confluence of the adjoining pustules.

It is this peculiar appearance of the vaccine disease, which is to be particularly attended to, in forming our opinion of its genuine character. The more it recedes from this standard, the greater is the probability of its being a spurious disease which is excited. It may be proper to observe, when the vaccination is performed with an infected thread, the subsequent pustule is sometimes of an oblong or oval figure, though still retaining its regular circumscribed form.

About the fifth day, the pustule begins to change from the red pimple to a vesicle containing a fluid, which, through the cuticle, somewhat resembles the colour of whey. This fluid is at its formation in its most active state, and probably will be less liable to fail, if taken at this early period, than if delayed to a later day. From the sixth to the tenth has been mentioned as the proper period for collecting it.\*

During this interval, the pustule augments considerably; the flattened appearance becoming more conspicuous in proportion to its increase of size; so that sometimes in a pustule of nearly half an inch diameter, its

\* The scab when it falls off, is now most frequently used for inoculation; a portion of which, about the size of a pin's head, may be moistened, and rubbed to a tenaceous consistency. This being taken on the point of a sharp lancet, may be introduced by a slight puncture under the skin of the arm, below the shoulder.

elevation above the surrounding skin will scarcely, if at all, exceed the one tenth, or the one twelfth of an inch.

About the eighth or ninth day, the pustule having arrived at maturity, the constitutional symptoms begin to show themselves; the general indisposition being preceded by swelling, and pain of the pustule shooting up towards the arm pit, the glands of which now become swelled and painful, especially on moving the arm, whilst the system sympathises, as evinced by languor, drowsiness, paleness, chilliness, and flushes of heat, head-ache, pain and fulness of the eyes, pain of the limbs and of the back, loss of appetite, nausea, and sometimes vomiting, an increased frequency of pulse, thirst, and white tongue.

It is not to be supposed that these all occur in one patient; on the contrary, it is difficult in many instances to detect the presence of any one of them; some or other of them, however, for the most part occur, and continue with greater or less violence, (seldom so as to confine the patient.) from one hour, to two, three or more days, when they subside spontaneously, without any disagreeable consequence.

The slight marginal inflammation, which has accompanied it from its first appearance, about the eighth or ninth day begins to augment very moderately, increasing more rapidly about the tenth or eleventh day, so as to extend to one, two, three, or more inches in diameter, forming a most beautiful efflorescence, which has been regarded as a proof, that the general affection of the system had taken place. As however this does not always exist, and yet the disease is perfect, we must not lay too much stress upon it, nor be alarmed at its non-appearance, under an idea of the disease being merely local.

The centre of the pustule which is always depressed, now begins to assume a darker appearance; this gradually extends to the circumference, and in three, four, or five days, the scab is generally complete, so that by the fourteenth day it is of a brown colour, darker in the centre, and assuming a polished hue. We may notice here, that in the African, it rather seems influenced by the colour of the skin, as it generally approaches to a black. Dr. Spense of Dumfries. Virginia, says, that it precisely re-

sembles "a piece of rough black sealing wax." This dark brown, or mahogany appearance, daily grows more intense as the fluid beneath is absorbed; at length it begins to detach itself at the circumference from the edge of the surrounding skin, still adhering to the centre beneath, till eventually it falls off, at different periods of time, generally from three to four weeks from vaccination, leaving the skin sound, but mostly with a slight depression or pit.

About the eleventh day the circumscribed redness is mostly at its height, when it exhibits the appearance of a pink or damask rose, accompanied with tumefaction and hardness of the limb to the extent which it occupies. Its appearance is sometimes alarming to those, who from not having before seen the varieties of the disease, are not prepared for such a sudden alteration. It however subsides in a few days, and frequently retires from the centre first; leaving as it were, an interval of uninflamed surface, surrounded by a ring of efflorescence. A light blush, however, mostly remains till the completion of the scab; the tumefaction generally declines with the efflorescence.

After what has been said upon this subject, it will only be necessary to present a comparative view of the effects of vaccination and the inoculated small pox, for all to be fully satisfied of the decided preference to which the former is entitled.

Vaccination, or the inoculated cow pox, is a uniformly mild and inoffensive disease, neither disgusting in its appearance, nor attended with danger. In general, it produces no eruption, except that in the inoculated part. Another advantage it possesses, is that it requires neither confinement nor loss of time, and few or no medicines are necessary; it occasions no subsequent disfiguration, and lastly, is not contagious, and may therefore be introduced into any family or neighbourhood, without affecting others.

The inoculated small pox also, is generally mild, but in some few instances is attended with all the violence, danger, and unpleasant appearances of the natural form. Of those who are inoculated. says Dr. Thomas, it has



been computed that one out of three hundred is destroyed, and that one in forty has the disease in a dangerous form. Eruptions, more or less numerous, are scattered over the body, and the disease requires preparation by diet and medicine before the appearance of the eruptions, as well as confinement, loss of time, and various expenses during its different stages. The artificial disease, moreover, according to some writers, is as contagious as the natural small pox, and where it is severe, pits or scars are often a consequence. Besides the disadvantages already spoken of, we may mention, that it cannot with safety be introduced into the system in early infancy or old age, or during pregnancy; vaccination, on the contrary, is subject to no such restrictions.

After pursuing this interesting subject thus far, Dr. Thomas concludes his remarks, by observing, "that the Royal College of Physicians, and the different learned bodies of medical men, to whose consideration the merits of this important discovery have been referred by the legislature of the country, have almost unanimously pronounced vaccination to be a perfectly safe and effectual preventive of the small pox."

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## OF THE CHICKEN POX.

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THIS disease is more incident to children than to grown people. It never affects the patient more than once in his life; and then it appears so trifling as seldom to require the assistance of a physician. The chicken-pox is by some considered contagious, and they suppose the disease to be caught by coming within the infected at-

mosphere of the patient, or from the clothes of those who have been visiting the sick.

**SYMPTOMS.**—This disease comes on with moderate symptoms of fever, which generally, on the second day, is followed by an eruption of red pimples over the whole body. They are soon filled with a thin whitish fluid, which sometimes assumes a yellow colour, with a light inflamed base, but the fluid contained in the pustules has not the property of pus or matter. After the eruption appears, the fever subsides, and, in three or four days, the pustules dry, become of a brown colour, and scale off.

It is a matter of serious importance, to distinguish this disease from the small-pox, as sometimes the most dangerous consequences have ensued from the mistake. Children have been seized with the small-pox, and have died, when their parents thought they had past through the disease.

This disease may be distinguished from the small-pox, first, by the eruptive fever being more moderate and of shorter duration. Secondly, by the pustules generally containing matter of the colour of milk.\* Thirdly, by the pustules filling quicker and continuing a shorter time on the skin, at farthest not more than four or five days, before they come dry, of a brown colour, and scale off.

**MODE OF TREATMENT.**—The treatment of this disease should be, by cooling regimen, similar to that used in the small-pox. This must be more particularly attended to, if the symptoms of fever should be considerable, which is rarely the case. After the pustules empty themselves, and become dry, the patient must be purged with jalap and cream of tartar.

## OF THE MEASLES.

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THE measles appeared in Europe about the same time with the small-pox, and in some respects they are similar to each other. They both came from the same quarter of the world, are both supposed to be infectious, and seldom attack the same person more than once. The measles are most common in the spring season, and generally disappear in the summer. The disease itself, when properly managed, seldom proves fatal; but its consequences are often very troublesome.

**CAUSES.**—Of these we are uncertain; it is, however, thought by many, that this disease, like the small-pox, proceeds from infection, and is more or less dangerous, according to the constitution of the patient, the season of the year, the climate, &c.

**SYMPTOMS.**—The measles, like other fevers, are preceded by alternate fits of heat and cold, by sickness, and loss of appetite. The tongue is white, but generally moist. There is a short cough, a heaviness of the head and eyes, drowsiness, and a running at the nose. Sometimes, indeed, the cough does not begin before the eruption has appeared. There is an inflammation and heat in the eyes, with an acrid discharge from them, and great acuteness of sensation, so that they cannot bear the light without pain. The eye-lids frequently swell so as, for a time, to occasion blindness. The patient generally complains of his throat; and a vomiting or looseness often precedes the eruption. The stools in children are com-

monly greenish; they complain of an itching of the skin, and are remarkably peevish. Bleeding at the nose is common, both before and in the progress of the disease.

About the fourth day, small spots, resembling flea-bites, appear, first upon the face, then upon the breast, and afterwards on the extremities: these may be distinguished from the small-pox by their scarcely rising above the skin. The fever, cough, and difficulty of breathing, instead of being removed by the eruption as in the small-pox, are rather increased; but the vomiting generally ceases.

About the sixth or seventh day from the time of sickening, the measles begin to turn pale on the face, and afterwards upon the body; so that by the ninth day they entirely disappear. The fever, however, and difficulty of breathing, often continue, especially if the patient has been kept upon too heating a regimen. Petechiæ, or purple spots, may likewise be occasioned by this error. A violent looseness sometimes succeeds the measles; in which case, the patient's life is in imminent danger.

Such as die of the measles, generally expire about the ninth day from the attack, and are commonly carried off by inflammation of the lungs. The most favourable symptoms are, a moderate looseness, a moist skin, and a plentiful discharge of urine.

When the eruption suddenly recedes, and the patient is seized with a delirium, he is in the greatest danger. If the measles turn too soon of a pale colour, it is an unfavourable sign—great weakness, vomiting, restlessness, and difficulty of swallowing, are also unpleasant symptoms. Purple or black spots appearing among the measles are very unfavourable. When a continual cough, with hoarseness, succeeds the disease, there is reason to suspect an approaching consumption of the lungs.

Nature, in this disease, should be assisted by proper cordials, in throwing out the eruption, if her efforts be too languid; but when they are too violent, they must be restrained by evacuations, and cool diluting liquors. We ought likewise to endeavor to appease urgent symptoms, such as the cough, restlessness, and difficulty of breathing.



**MODE OF TREATMENT.**—The measles being an inflammatory disease, bleeding is commonly necessary, especially when the fever runs high, with difficulty of breathing, and great oppression of the breast. But if the disease be of a mild kind, bleeding may be omitted.

Bathing the feet and legs frequently in warm water, both tends to abate the violence of the fever, and promote the eruption.

The patient is often greatly relieved by vomiting. When there is a tendency this way, it ought to be promoted by drinking lukewarm water, or weak chamomile tea.

When the cough is very troublesome, with dryness of the throat, and difficulty of breathing, the patient may hold his head over warm water, and draw the steam into his lungs. He may likewise palliate these distressing symptoms by the use of barley water, arrow root, or a solution of gum arabic. The addition of lemon juice, or a small quantity of saltpetre to either of these, will add to their pleasantness as well as efficacy.

If, at the turn of the disease, the fever assumes new vigour, and there appears great danger of suffocation, the patient must be bled according to his strength, and blisters applied over the breast, with a view to prevent the load from being thrown on the lungs; where, if an inflammation should fix itself, the patient will be imminent danger.

Where the measles, from any cause, suddenly recede or disappear before the proper period, and great anxiety, delirium, or convulsions ensue, we should endeavour to restore the eruption, by putting the patient into a warm bath; and, afterwards, giving him warm diluent drinks, supporting him, at the same time, with wine and cordials—blisters should, also, be applied to the legs and arms.

When the purple or black spots appear, the patient's drink should be sharpened with elixir of vitriol; and, if the symptoms increase, the bark in quantities proportionate to the age of the patient may be given in Madeira or good Lisbon wine.

Opiates are sometimes necessary, but should never be given except in cases of extreme restlessness, a violent

looseness, or when the cough is very troublesome, and the fever has in some degree subsided.

Where the measles have gone off, it will be proper to give one or two doses of some mild purgative. Cooling, opening medicines are especially necessary after this disease, to carry off all disposition of the lungs to inflammation. Indeed, throughout every stage of the complaint, the state of the lungs should be carefully considered, for it is upon affections of that organ that the danger of measles in most cases depends.

If a violent looseness succeeds the measles, it may be checked by taking for some days a gentle dose of rhubarb in the morning, and an opiate at night; but, if these do not remove it, bleeding will seldom fail to have that effect.

Patients recovering, after the measles, should be careful what they eat or drink. Their food, for some time, ought to be light, and in small quantities; their drink diluting, and rather of an opening nature, as butter milk, whey, and such like. They ought also to beware of exposing themselves too soon to the cold air, lest a suffocating catarrh, asthma, or a consumption of the lungs should ensue.

Should a cough, with a difficulty of breathing, and other symptoms of a consumption remain after the measles, small quantities of blood may frequently be drawn, at proper intervals, as the patient's strength and constitution will permit. He ought to remove to a free air, if in a large town, and frequently to ride out. He should adhere to a diet of milk and vegetables; and if these do not succeed, let him remove to a warmer climate.

Attempts have been made to communicate the measles, as well as the small-pox, by inoculation; and we think it probable, that in time, the practice may succeed. Dr. Home, of Edinburgh, says, he communicated the disease by the blood. Others have tried this method, and have not found it to succeed. Some think the disease would be more certainly communicated, by rubbing the skin of a patient who has the measles, with cotton, and afterwards applying the cotton to a wound, as in the small-pox; while others recommend a piece of flannel which had been

applied to the patient's skin, all the time of the disease, to be afterwards laid upon the arm or leg of the person to whom the infection is to be communicated. There is little doubt, but this disease, as well as the small-pox, may be communicated in various ways; the most probable, however, is either from cotton rubbed upon the skin, as mentioned above, or by introducing a little of the sharp humor, which distils from the eyes of the patient into the blood. It is acknowledged that such patients as have been inoculated, had the disease very mildly; we therefore wish the practice were more general.

Cool regimen is necessary here as well as in the small-pox. The food must be light, and the drink diluting. Acids do not answer so well in the measles as in the small-pox, for they tend to exasperate the cough. The most suitable liquors are decoctions of liquorice and sarsaparilla; infusions of flaxseed or balm tea; whey, and barley water. These, if the patient be costive, may be sweetened with honey; or, if that should disagree with the stomach, a little manna may occasionally be added to them.

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## OF THE SCARLET FEVER.

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THE scarlet fever is so called from the colour of the patient's skin. It happens at any season of the year, but is most common towards the end of summer; when it often seizes whole families. Infants and young persons are most subject to it.

It begins, like other fevers, with coldness and shivering, without any violent sickness. Afterwards the skin

is covered with red spots, which are broader, more florid, and less uniform than the measles. They continue two or three days, and then disappear; after which, the cuticle, or scarf skin, falls off.

There is seldom any occasion for medicine in this disease. The patient ought, however, to keep within doors, to abstain from flesh, strong liquors, and cordials, and to drink freely of cool diluting liquors. If the fever runs high, the bowels must be kept gently open by emollient clysters, or cream of tartar and nitre—one or two drams of the former, with eight or ten grains of the latter, may be taken two or three times a day.

Children and young persons are sometimes seized at the beginning of this disease with a kind of stupor and epileptic fits. In this case, the feet and legs should be bathed in warm water, and if the pulse be full and hard, a large blister applied to the neck.

The scarlet fever is not always so mild. It is sometimes attended with malignant symptoms, in which case, it is always dangerous. In the malignant scarlet fever the patient is not only affected with coldness and shivering, but with languor, sickness, and great oppression; to these succeed excessive heat, nausea and vomiting, with a soreness of the throat; the pulse is extremely quick, but small and depressed; the breathing frequent and laborious; the skin hot, but not quite dry; the tongue moist, and covered with a whitish mucus; the tonsils inflamed and ulcerated. When the eruption appears, it brings no relief; on the contrary, the symptoms generally grow worse, and fresh ones come on, such as purging and delirium.

When this disease is mistaken for a simple inflammation, and treated with repeated bleedings, purging and cooling medicines, it generally proves fatal. The only medicines to be depended on in this case are such articles as the bark, wine, snake root, &c. The treatment must in general be similar to that of the ulcerous sore throat, of which we have already spoken.



## OF THE ERYSIPELAS:

OR,

ST. ANTHONY'S FIRE.

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THIS disease, which is also called the *the rose*, attacks persons at any period of life, but is most common between the age of thirty and forty. Persons of a sanguine or plethoric habit, are most liable to it. It often attacks young people, and pregnant women; such as have once been afflicted with it, are very liable to a renewed attack. Sometimes it is a primary disease, and at other times only a symptom of some other malady. Every part of the surface of the body is liable to be attacked by an erysipelas; it most frequently, however, affects the face or legs, but especially the former. It is most common in autumn, or whenever hot weather is succeeded by cold and wet.

CAUSES.—The erysipelas may be occasioned by violent passions or affections of the mind; as fear, anger, &c. When the body has been heated to a great degree, and is immediately exposed to the cold air, so that the perspiration is suddenly checked, an erysipelas will often ensue. It may also be occasioned by drinking to excess, by continuing too long in a warm bath, or by any thing that overheats the blood. If any of the natural evacuations be obstructed, or are thrown off in too small quantities, an erysipelas may be the consequence. The same

effect will sometimes follow from the stoppage of artificial evacuations; as issues, setons, or the like.

**SYMPTOMS.**—This complaint commences with shivering, thirst, loss of strength, pain in the head and back, heat, restlessness, a quick pulse, vomiting, and sometimes delirium. On the second, third, or fourth day, the part swells, becomes red, and small pustules appear; at which time the fever generally abates.

When an erysipelas attacks the face, the skin becomes tumid, red, and covered with small pustules filled with clear water. One, or both eyes are generally closed by the swelling; and there is a difficulty of breathing. If the mouth and nostrils are very dry, and the patient becomes drowsy, there is reason to suspect an inflammation of the brain.

If the complaint affects the breast, it swells, becomes exceedingly hard, with great pain, and is apt to suppurate. There is a violent pain in the arm-pit of the side affected, where an abscess is often formed.

Where it seizes the foot, the parts contiguous swell, become of a shining scarlet colour, and so extremely sensible, that the slightest impression made upon them causes pain.

If in a day or two, the swelling subsides, the heat and pain abate, the color of the part turns yellow, the cuticle or scarf skin breaks and falls off in scales, the danger is over.

When the erysipelas is extensive, and affects a very sensible part of the body, the danger is great. If the red color changes into a livid or black, it will probably end in mortification. Sometimes the inflammation cannot be reduced, but proceeds to suppuration; in such cases, long, narrow, indolent ulcers, or mortification, may be the consequence.

Such as die of this disease, are commonly carried off, about the seventh or eighth day, by a fever, which is attended with difficulty of breathing, and sometimes with a delirium and great drowsiness.

**MODE OF TREATMENT.**—In this disease much

mischief is often done by external applications. People, when they see an inflammation, immediately think that a great deal ought to be done. This indeed is necessary in some species of inflammation; but, in an erysipelas, the safer course is simply to apply flour or starch, gently sprinkled over the part. Almost all ointments, salves, and plasters, being of a greasy nature, are rather injurious than beneficial. At the beginning of this disease, it is neither safe to promote a suppuration, or to repel the efflorescence too quickly. The erysipelas, in some respects, resembles the gout, and is to be treated with the greatest caution. Fine wool, or very soft flannel, are the safest applications to the part. These not only defend it from the external air, but likewise promote the perspiration, which has a great tendency to carry off the disease.

It is not uncommon to bleed in erysipelas; but this requires caution. If the fever be high, the pulse hard and strong, and the patient vigorous, it will be proper to draw blood; but the quantity to be drawn must be regulated by these circumstances, and the operation repeated as the symptoms may require. If the patient has been accustomed to strong liquors, and the disease attacks his head, bleeding is absolutely necessary.

Bathing the feet and legs frequently in lukewarm water, when the disease attacks the face or brain, has an excellent effect. It tends to cause a derivation from the head, and seldom fails to relieve the patient. When bathing proves ineffectual, warm poultices, or strong mustard plasters, may be applied to the soles of the feet, for the same purpose.

In cases where bleeding is requisite, it is likewise necessary to keep the bowels open. This may be effected by emollient clysters, or small doses of nitre and cream of tartar. Some recommend very large doses of nitre in the erysipelas; but this article seldom sits easy on the stomach, when taken in large quantities. It is, however, if given in proper proportions, one of the best medicines when the fever and inflammation run high. Half a dram of it, with one or two drams of cream of tartar, may be given in the patient's ordinary drink, four times a day.

When the erysipelas leaves the extremities, and seizes the head, so as to occasion a delirium or stupor, it is absolutely necessary to open the bowels. If clysters and mild purgatives fail to produce this effect, stronger ones should be given. Blisters must likewise be applied to the neck, or behind the ears, and sharp cataplasms laid to the soles of the feet.

When the inflammation cannot be subdued, and the part has a tendency to ulcerate, it will be proper to promote suppuration, which may be done by the application of emollient poultices, such as bread and milk, or those made with powdered flaxseed.

When the black, livid, or blue color of the part shows a tendency to mortification, the bark must be administered. It may be taken along with acids, as recommended in the small-pox, or in any other form, more agreeable to the patient. It must not, however, be trifled with, as the patient's life is at stake. A dram may be given every two hours, if the symptoms be threatening; and cloths dipped in warm camphorated spirits, or in the tincture of myrrh and aloes, may be applied to the part, and frequently renewed. It may, likewise, be proper in this case to apply poultices of the bark, or to foment the part affected with a strong decoction of it.

Such as are liable to frequent attacks of the erysipelas, ought carefully to guard against all violent passions; to abstain from strong liquors, and all fat, and highly nourishing food. They should, likewise, take sufficient exercise, carefully avoiding the extremes of heat or cold. Their food should chiefly consist of milk, and such fruits, herbs and roots, as are of a cooling quality; and their drink ought to be small-beer, whey, buttermilk, and such like. They should never suffer themselves to be long costive. If that cannot be prevented by suitable diet, it will be proper to take frequently a gentle dose of cream of tartar, or some other mild purgative.

In the erysipelas the patient must neither be kept too hot nor too cold, as either of these extremes will tend to repel the complaint; this is always to be guarded against. When the disease is mild, it will be sufficient to keep the patient within doors. without confining him



to his bed, and to promote the perspiration by diluting liquors.

The diet ought to be slender, and of a moderately cooling and moistening quality, as gruel, panado, chicken broth, with cooling herbs and fruits, avoiding flesh, fish, strong drink, spices, and all other things that may heat and inflame the blood; the drink may be barley water, an infusion of elder flowers, common whey, and such like. But if the pulse be low, and the spirits depressed, the patient must be supported with things of a cordial nature. His food may consist of sago gruel, with a little wine, and nourishing broths may be taken in small quantities, and often repeated.

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## OF INVOLUNTARY DISCHARGES OF BLOOD.

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INVOLUNTARY discharges of blood often happen from various parts of the body. These are so far from being always dangerous, that they prove often salutary. When such discharges are critical, which is frequently the case in fevers, they ought not to be stopped. Most people, afraid of the smallest discharge of blood from any part of the body, endeavour, when they occur, to arrest them as speedily as possible, by which means an inflammation of the brain, or some other fatal disease, is sometimes occasioned, which, had the discharge been allowed to go on, might have been prevented.

Periodical discharges of blood, from whatever part of the body, must not be stopped. They are always the efforts of nature to relieve herself; and serious complaints

have often been the consequence of obstructing them. It may indeed be sometimes necessary to check the violence of such discharges; but even this requires great caution. Instances might be given, where even the stopping of a small periodical flux of blood from one of the fingers, has proved fatal.

In the early period of life, bleeding at the nose is very common. Those who are further advanced in years, are more liable to discharges of blood from the lungs. After the middle period of life, hæmorrhoidal fluxes are most common; and in the decline of life, discharges of blood from the urinary passages.

Involuntary fluxes of blood may proceed from very different, and often, from quite opposite causes. Sometimes they are owing to a particular construction of the body, a sanguine temperament, a laxity of the vessels, or a plethoric habit. They may proceed from an inflammatory disposition of the blood, in which case there is generally some degree of fever; this likewise happens when the flux is occasioned by an obstructed perspiration, or a stricture upon the skin, the bowels, or any particular part of the system.

Hæmorrhages occur in malignant fevers, dysentery, scurvy, and occasionally in small pox. They may likewise be brought on by too liberal a use of acrid stimulating medicines, such as cantharides, &c. Food of an irritating quality may likewise occasion discharges of blood, as also strong purges and vomits, or any thing that greatly stimulates the bowels.

Violent passions or agitations of the mind may, also, have this effect. These often cause bleeding at the nose; and sometimes a determination of blood to the brain. Violent efforts of the body, by overstraining the vessels, may have the same effect, especially when the body is long kept in an unnatural posture, as hanging the head very low, &c.

The cure of an hæmorrhage must be adapted to its cause. When it proceeds from too much blood, or a tendency to inflammation, bleeding, with gentle purges and other evacuations, will be necessary. It will likewise be proper for the patient in this case to live chiefly

upon vegetable diet, to avoid all strong liquors, and food that is of an acrid, hot or stimulating quality. The body should be kept cool, and the mind easy.

When hæmorrhage comes on in malignant fevers, scurvy, &c. the patient ought to live chiefly upon acid fruits with milk, and vegetables of a nourishing nature, as sago or tapioca. His drink may be wine diluted with water, and sharpened with the juice of lemon, vinegar, or the elixir of vitriol. The best medicine in this case is the Peruvian bark, which may be taken according to the urgency of the symptoms.

When a discharge of blood is the effect of acrid food, or of strong stimulating medicines, the cure is to be principally effected by soft and mucilaginous diet.

When an obstructed perspiration, or a stricture upon any part of the system is the cause of an hæmorrhage, it may be removed by drinking warm diluting liquors, lying in bed, and bathing the extremities in warm water.



## OF BLEEDING AT THE NOSE.



**SYMPTOMS.**—THIS disease is commonly preceded by some degree of quickness of the pulse, flushing in the face, pulsation of the temporal arteries, heaviness in the head, dimness of the sight, with heat and itching of the nostrils.

To persons who abound with blood, this discharge is very salutary. It often cures a vertigo, the head ache, a phrenzy, and even an epilepsy. In fevers, where there is a great determination of blood towards the head, it is of the utmost service. It is beneficial in inflammations of the liver and spleen, and often in the gout and rheu-

matism. In all diseases where bleeding is necessary, a spontaneous discharge of blood from the nose is of more service than the same quantity drawn with a lancet.

In discharges of blood from the nose, the great point is to determine whether they ought to be stopped or not. It is a common practice to stop bleeding, without considering whether it be a disease, or the cure of a disease. This conduct proceeds from fear; but it has often bad, and sometimes fatal consequences.

When a discharge of blood from the nose happens in an inflammatory disease, there is always reason to believe that it may prove salutary; and therefore it should be suffered to go on, at least as long as the patient is not weakened by it.

When it happens to persons in perfect health who are full of blood, it ought not to be suddenly stopped, especially if the symptoms of plethora mentioned above have preceded it. In this case, it cannot be stopped without risking the patient's life.

Whenever bleeding at the nose relieves any bad symptom, and does not proceed so far as to endanger the patient's life, it ought not to be stopped. But when it returns frequently, or continues until the pulse becomes low, the extremities begin to grow cold, the lips pale, or the patient complains of being sick or faint, it must immediately be stopped.

**MODE OF TREATMENT.**—In effecting this object, the patient should be set nearly upright, with his head reclining a little, and his legs immersed in water about the warmth of new milk. His hands ought likewise to be put in lukewarm water, and his garters may be tied a little tighter than usual. Ligatures may be applied to the arms, about the place where they are usually made for bleeding, and with nearly the same degree of tightness. These must be gradually slackened as the blood begins to stop, and removed as soon as it ceases entirely.

Sometimes dry lint will stop the bleeding. When this does not succeed, dossils of lint dipped in strong spirits of wine or brandy, may be put up the nostrils. Blue



vitriol, dissolved in water, may likewise be used for this purpose, or a piece of sponge dipped in the white of an egg, well beat up, may be rolled in a powder made of equal parts of white sugar, burnt alum, and white vitriol, and put up the nostril whence the blood issues.

Internal medicines can hardly be of use here, as they have seldom time to operate. It will not, however, be improper to give the patient an ounce of Epsom salts, dissolved in four or five ounces of barley water. This may be taken at a draught, and repeated, if it does not operate, in a few hours. Ten or twelve grains of nitre may also be taken in a glass of cold water and vinegar every hour, or oftener, if the stomach will bear it. If a stronger medicine be necessary, a tea cupfull of lavender water, with twenty or thirty drops of the elixir of vitriol, may be taken every hour. When these things cannot be had, the patient may drink cold water, with a little common salt in it, or equal parts of water and vinegar.

The genitals being immersed for some time in cold water, will generally stop a bleeding at the nose.

Sometimes, however, when the discharge of blood is apparently stopped, it continues to flow internally. This is very troublesome, and requires particular attention, as the patient is apt to be suffocated, especially if he falls asleep; this he is very apt to do after losing a great quantity of blood.

When the patient is in danger of suffocation from the blood getting into his throat, the passages may be stopped by running threads up the nostrils, and bringing them out at the mouth; then fastening pieces of sponge or small rolls of linen cloth to their extremities; afterwards drawing them back, and tying them on the outside with a sufficient degree of tightness.

After the bleeding is stopped, the patient ought to be kept as easy and quiet as possible. He should not pick his nose, nor take away the tents or clotted blood, until they fall off of their own accord; neither should he lie with his head low.

Those who are affected with frequent bleeding at the nose, ought to bathe their feet often in tepid water, and to keep them warm and dry. They ought to wear nothing tight about their necks, to keep their body as much in an

erect posture as possible, and never to view any object obliquely. If they have too much blood, a vegetable diet, with now and then a cooling purge, is the safest way to lessen it.

But when the disease proceeds from a relaxed state of the vessels, the diet should be rich and nourishing, as strong broths, jellies, sago-gruel with wine and sugar. Infusions of the bark in wine ought to be taken and persisted in for a considerable time.



## OF THE BLEEDING AND BLIND PILES.



A DISCHARGE of blood from the hæmorrhoidal vessels is called the *bleeding piles*. When the vessels only swell, and discharge no blood, but are exceedingly painful, the disease is called the *blind piles*.

Persons of a loose spongy fibre, of a bulky size, who live high, and lead a sedentary inactive life, are most subject to this disease. It is often owing to a hereditary predisposition. Where this is the case, it attacks persons more early in life than when it is accidental. Men are more liable to it than women, especially those of a sanguine, plethoric, or scorfulous habit, or of a melancholy disposition.

**CAUSES.**—The piles may be occasioned by an excess of blood, by strong aloetic purges, high seasoned food, drinking great quantities of sweet wines, the neglect of bleeding, or other customary evacuations, much riding,

great costiveness, or any thing that occasions hard or difficult stools. Anger, grief, and other violent passions, or sitting on the damp ground, will, likewise, occasion the piles. Pregnant women are often afflicted with them.

A discharge of blood, from the *anus*, or lower end of the bowels. is not always to be treated as a disease. It is sometimes even more salutary than bleeding at the nose, and often prevents or carries off diseases. It is peculiarly beneficial in the gout, rheumatism, asthma, and hypochondriacal complaints, and often proves critical in colics, and inflammatory fevers.

**MODE OF TREATMENT.**—In the management of the patient, regard must be had to his habit of body, his age, strength, and manner of living. A discharge which might be excessive, and prove hurtful to one, may be very moderate, and even salutary to another. That, only, is to be esteemed dangerous which continues too long, and is in such quantities as to waste the patient's strength, hurt the digestion, nutrition, and other functions necessary to life.

When this is the case, the discharge must be checked by a proper regimen, and astringent medicines. The diet must be cool, but nourishing, consisting chiefly of bread, milk, cooling vegetables and broths. The drink may be chalybeate waters, and decoctions or infusions of he astringent and mucilaginous plants.

The bark is, likewise, proper in this case, both as a strengthener and astringent. Half a dram may be taken in a glass of port wine, sharpened with a few drops of the elixir of vitriol, three or four times a day.

The bleeding piles are sometimes periodical, and return regularly once a month, or once in three weeks. In this case, they are always to be considered as a salutary discharge, and by no means to be stopped. Some have entirely ruined their health by stopping a periodical discharge of blood from the hæmorrhoidal veins.

In the *blind piles*, bleeding is generally of use. The diet must be light and thin, and the drink cool and diluting. The body must be kept gently open. This may be done by small doses of the flowers of brimstone and cream

of tartar. These may be mixed in equal quantities, and two tea spoonsful taken two or three times a day, or oftener, if necessary.

Emollient clysters are, here likewise, beneficial; but, there is sometimes such a constriction of the *anus*, that they cannot be thrown up. In this case, vomits have very good effects.

When the piles are exceedingly painful and swelled, but discharge nothing, the patient ought to sit over the steam of warm water. He may likewise apply a linen cloth dipped in warm spirits of wine to the part, or poultices of bread and milk. If these do not produce a discharge, and the piles appear large, leeches must be applied as near them as possible, or, if they will fix upon the piles themselves, the effect produced will be more beneficial. When leeches will not attach themselves to the piles, those tumours may be opened with the lancet. The operation is very easy, and attended with no danger.

Various ointments, and other external applications, are recommended in the piles: as mixtures of sugar of lead, white vitriol, or powdered galls with lard—these are often attended with benefit. When the pain, however, is very great, an application of two ounces of fresh lard, and half an ounce of laudanum, beat up with the yolk of an egg, may be made, to allay irritation;—or take of powdered opium twenty grains, of pulverized galls half an ounce of fresh lard a sufficiency to make the mixture into a mass, and apply a portion of it to the tumours several times a day. This has been found highly serviceable.



## SPITTING OF BLOOD.



A DISCHARGE of blood from the lungs is called *hæmoptysis*, or *spitting of blood*. Persons of a slender make, and a lax fibre, who have long necks and narrow breasts, are most liable to this disease. It is most common in the spring, and generally attacks people before they arrive at the prime or middle period of life. It is a common observation, that those who have been subject to bleeding at the nose when young, are afterwards most liable to this hæmorrhage from the lungs.

CAUSES.—Hæmoptysis may proceed from excess of blood, from a peculiar weakness in the lungs, or a bad conformation of the breast, excessive drinking, running, wrestling, singing, or speaking aloud. Such as have weak lungs ought to avoid all violent exertions of that organ. They should likewise guard against violent passions, excessive drinking, and every thing that occasions a rapid circulation of the blood.

This disease may, likewise, proceed from wounds of the lungs. The obstruction of any customary evacuation, as neglect of bleeding or purging at the usual seasons, the stoppage of the bleeding piles in men, or the menses in women, may likewise occasion a spitting of blood. It is often the effect of a long and violent cough; in which case, it is frequently the forerunner of a consumption. A violent degree of cold suddenly applied to the external parts of the body, will sometimes occasion this species of hæmorrhage. It may, likewise, be pro-

duced by breathing air which is too much rarified to be able properly to expand the lungs. This is often the case with those who work in hot places, as furnaces, or glass-houses. It is likewise said to happen to such as ascend to the top of very high mountains.

Spitting of blood is not always a primary affection. It is often only a symptom, and in some diseases not an unfavourable one. This, when the discharge is moderate, is the case in pleurisies and inflammations of the lungs. In a dropsy, scurvy, or consumption, it is a bad symptom, and in the last mentioned disease it shows that the lungs are ulcerated. It may be known from hæmorrhage of the stomach by the discharge from that organ being more copious, more clotted, and of a darker colour than that from the lungs; by the discharge being mixed with portions of food from the stomach, and by its being unattended with coughing; when, on the contrary, the discharge is from the lungs, it is brought up by hawking or coughing, is usually of a florid red colour, and mixed with a frothy mucus or spittle.

**SYMPTOMS.**—Spitting of blood, is generally, preceded by a sense of weight and oppression of the breast, a dry tickling cough, hoarseness, and a difficulty of breathing. Sometimes it is ushered in with shivering, coldness of the extremities, costiveness, great lassitude, flatulence, and pain of the back and loins. As the above symptoms do not attend a discharge of blood from the gums or posterior part of the mouth, these may always be distinguished from hæmorrhage of the lungs. Sometimes the blood spit up is thin, and of a florid red; and at other times it is thick, and of a dark or blackish colour; nothing can be inferred from this circumstance, but that, the blood has lain a longer or shorter time in the lungs before it was discharged.

Spitting of blood, in a strong, healthy person, of a sound constitution, is not very dangerous; but when it attacks the tender and delicate, or persons of a weak lax fibre, it is with difficulty removed. The danger is greater when the discharge proceeds from the rupture of a large vessel than of a small one. When the extrava-

sated blood is not spit up, but lodges in the breast, it corrupts, and greatly increases the danger. When the blood proceeds from an ulcer in the lungs, it is generally fatal.

**MODE OF TREATMENT.**—An hæmoptysis may generally be moderated by avoiding or removing every irritation that might tend to increase or promote it; hence in every case where the motion and force of the circulation is increased, the whole depleting course is to be observed; cool air is to be admitted, and cool drinks of a sedative quality, by which we mean those which abate arterial action, are to be administered. In addition to bleeding, purging and a cooling diet—the patient should take from a scruple to a dram of saltpetre, dissolved in an infusion of tamarinds, or of senna and cream of tartar every hour, until the hæmorrhage ceases.

When the hawking or coughing up of blood continues without much diminution after free bloodletting, double linen cloths wrung out of cold vinegar and water applied to the thorax, and frequently renewed, seldom fail of suspending the disease; the recurrence of which, may generally be prevented by subsequent purging, and the application of a blister to the chest, especially when aided by the internal use of the sugar of lead, administered in doses of from one to four grains, and repeated every hour until the hæmorrhage ceases, and afterwards at longer intervals.

In certain cases of hæmoptysis and other hæmorrhages, the resistance of the small arteries is not in due proportion to the propulsive power of the heart. Hence this form or state of the disease is called passive, but in other cases this propulsive power being excessive, forces the ends of the small arteries open, though they may be in a healthy state. In the latter case, remedies to reduce the excitement and force of the circulation are requisite; in the former, those that give tone to the extreme vessels, without increasing the force or frequency of the action of the heart and arteries.

Opium has been observed to increase the hæmorrhage, if given while the pulse is strong, quick and active. But

after copious and repeated venesection it frequently prevents a recurrence, by obviating excess of sensibility and increased excitement.

Of the good effects of blisters, in preventing a recurrence of the discharge of blood, when applied to the chest, after the disease has been of some days continuance, every practitioner must be satisfied.

Flannel worn next to the skin, in debilitated habits, is always useful, and has been frequently known to prevent a return of this complaint.

As a preventive to the recurrence of this disease, moderate exercise, especially that of sailing, because it is not attended with much muscular exertion, is peculiarly serviceable.

At the commencement of this complaint too great caution cannot be observed with respect to indulgence in any thing that has a tendency to quicken the pulse, or heat the body; for in the early stage it is always inflammatory, and accompanied with fever. When, however, the disease has been of some continuance, or has frequently recurred, its type is often changed, and we then have relaxation of the solids, and debility of the extreme arteries of the lungs. Under such circumstances, venesection, nitre, and the debilitating class of medicines are highly improper. Remedies, however, which rouse and strengthen the vital powers, and excite a vigorous and equable action in the vascular system, are clearly indicated in such cases of hæmoptysis.

The late Dr. Peter Glentworth, of Philadelphia, after having been subject to frequent recurrences of hæmoptysis, (which had become more frequent and alarming while he lived entirely on a milk and vegetable diet,) prevented the return of the disease himself, by taking half a pint of strong, hot wine sangaree, every night for a few weeks, drinking three glasses of pure wine in the course of the day, and living on a more substantial and invigorating diet.

Before he made trial of the hot wine sangree at night, he had frequently been prevailed on to take part of a glass of wine before dinner when he felt weaker than usual, which generally occasioned a cough and a return



of the hæmoptysis. But he had no return of the complaint after he had taken the warm sangree a few nights, and had changed his mode of living.

Many persons, whose systems were in an infirm and debilitated state, have procured relief from this form of the complaint by swallowing, repeatedly through the day, a tea spoonful of dry salt in fine powder, and have frequently prevented a recurrence of the distressing symptoms, by taking Peruvian bark freely, with the moderate use of claret, and subsisting on a more substantial diet than usual, wearing at the same time, in the cold season, a flannel shirt, drawers, worsted stockings, and taking moderate exercise in the open air.

Sea-salt has, of late, become a very fashionable medicine in cases of hæmoptysis. But its indiscriminate use must certainly be improper. As this salt not only assists digestion, but invigorates all the bodily functions by stimulating and contracting the fibres, it is evident that its exhibition can only be proper in cases of debility of the extreme arteries, or when the general vigour of the arterial system is impaired.

The tincture of digitalis, from its usual effects on the pulse after a few days use, has induced many physicians to make trial of it in this disease, but they differ widely in their account of its effects. Judging, however, from its well known power of reducing unnatural excitement in the circulation, we should not hesitate to employ it, in connection with frequent venesection and copious purging, in any case of hæmoptysis, accompanied with preternatural frequency of pulse.

The patient ought to be kept cool and easy. Every thing that heats the body or quickens the circulation, increases the danger. The mind ought, likewise, to be soothed, and every thing which excites the passions avoided. The diet should be soft, cooling, and slender; consisting of rice, boiled with milk, weak broths, barley-gruel, panado, &c. The diet, in this case, can scarcely be too low. Even water gruel is sufficient to support the patient for some days. All strong liquors must be avoided. The patient may drink milk and water, barley water, whey, and buttermilk. Every thing should be drank.

cold, and in small quantities at a time. He should observe the strictest silence, or at least speak with a very low voice.



## VOMITING OF BLOOD.



THIS is not so common as the other discharges of blood already mentioned; but it is very dangerous, and requires particular attention.

Vomiting of blood is generally preceded by pain of the stomach, sickness, and nausea; and is accompanied with great anxiety, and frequently fainting fits.

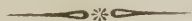
This disease is sometimes periodical; in which case, it is not very dangerous. It often proceeds from an obstruction of the menses in women; and sometimes from the stopping of the hæmorrhoidal discharges in men. It may be occasioned by any thing that greatly stimulates or wounds the stomach, as strong vomits or purges, acrid poisons, and sharp or hard substances taken into the stomach. It is often the effect of obstructions in the liver, the spleen, or some of the other viscera. It is sometimes produced by external violence, as blows or bruises, or any of the causes which produce inflammation. In hysteric women, vomiting of blood is very common, but not a dangerous symptom.

A great part of the danger in this disease, arises from the extravasated blood lodging in the bowels, and becoming putrid, by which a dysentery or malignant fever may be occasioned. The best way of preventing this, is to keep the body gently open, by frequently administering emollient clysters. Purges must not be given until

the discharge is stopt, otherwise they will irritate the stomach, and increase the disorder. All the food and drink must be of a mild cooling nature, and taken in small quantities. Even drinking cold water has sometimes proved a remedy, but it will succeed better when sharpened with the elixir of vitriol. When there are signs of an inflammation, bleeding may be necessary; but this the patient's weakness will rarely admit of.

During the continuance of vomiting, the sugar of lead and opium made into pills, in the proportions of one or two grains of the former, to half a grain of the latter, may be given two or three times during the day. If this should fail in producing any good effect, after a few hours, the muriated tincture of iron may be substituted in doses of twenty or thirty drops, in a wine glass of cold water, to be repeated every one or two hours until the hæmorrhage ceases. Blisters, applied over the region of the stomach, have been found beneficial in severe cases.

After the discharge is over the most perfect rest is necessary to guard against a relapse. If the patient is troubled with griping, occasioned by the acrimony of the blood lodged in the intestines, gentle purges will be necessary.



## OF BLOODY URINE.



THIS is a discharge of blood from the vessels of the kidneys or bladder, and is more or less dangerous, according to the different circumstances which attend it.

When pure blood is voided suddenly, without interruption, and without pain, it proceeds from the kidneys; but if the blood be in small quantities, of a dark colour,

and emitted with heat and pain about the lower part of the belly, it proceeds from the bladder. When bloody urine is occasioned by rough stones wounding the ureters in their descent from the kidneys to the bladder, it is attended with a sharp pain in the back, and difficulty of making water. If the coats of the bladder are hurt by a stone, and the bloody discharge follows, it is attended with the most acute pain, and a previous stoppage of urine.

Bloody urine may likewise be occasioned by falls, blows; the lifting or carrying of heavy burdens, hard riding, or any violent motion. It may also proceed from ulcers of the bladder, from a stone lodged in the kidneys, or from violent purges, or sharp diuretic medicines, especially cantharides or Spanish flies.

Bloody urine is always attended with some degree of danger: but peculiarly so when mixed with purulent matter, as this proves an ulcer to exist somewhere in the urinary passages. Sometimes this discharge proceeds from an undue quantity of blood in the circulation, in which case it is rather a salutary evacuation than a disease. If the discharge, however, be very great, it may waste the patient's strength, and occasion emaciation, a dropsy, or a consumption.

The treatment of this disorder must be varied, according to the different causes from which it proceeds.

When it is owing to a stone in the bladder, the cure depends upon an operation; a description of which, would be foreign to our purpose. If it is attended with symptoms of inflammation, bleeding will be necessary. The body must likewise be kept open by emollient clysters, or cooling purgative medicines; as cream of tartar, Epsom salts, or senna tea, sweetened with manna or brown sugar.

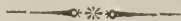
When bloody urine occurs in malignant diseases, as the small pox, low fevers, or the like, the patient's life depends on the liberal use of the bark and acids; and notwithstanding these, the disease, under such circumstances, often terminates fatally.

When there is reason to suspect an ulcer in the kidneys or bladder, the patient's diet must be cool, and his



drink of a soft, healing quality; as infusions of the inner bark of the slippery elm, liquorice, or solutions of gum-arabic in barley water, or flaxseed tea.

The early use of astringents in this disease is often attended with bad consequences. When the flux is stopped too soon, the clotted blood confined in the vessels, may produce inflammations and ulcers. If the cause be urgent, or the patient seems to suffer from the loss of blood, gentle astringents become necessary. In this case, the patient may take three or four ounces of lime water, with half an ounce of the tincture of bark, three times a day, or more frequently if necessary.



## PAINFUL AFFECTIONS.



PAINFUL affections may proceed from innumerable causes, and locate themselves in every part of the system. It would be incompatible with our present object, either closely to investigate causes, which, to say the least, are still obscured by uncertainty; or fully to treat of all those diseases, which, with propriety, might be brought under this head, in a more scientific but less popular work. Many of these affections, though noticed by writers, are so rare, that to dwell upon them, would rather gratify the curious reader, than confer upon the community any practical benefit. We shall therefore only point out those painful complaints which in this country occur most frequently, and are attended with the greatest inconvenience or danger.

## OF THE HEAD-ACH.



The head-ach is most generally a secondary or symptomatic affection, depending on some other disorders, as fevers, indigestions, or translations to the head of diseases originally seated in other parts, such as the gout, and rheumatism. Sometimes, however, it occurs independently of any other disease; when it often becomes tedious and difficult to remove.

The whole head is sometimes affected by this complaint; at other times it is confined to a particular side or back part of the head; now and then it affects the forehead, and occasionally the seat of pain is so limited, that it can readily be covered by the point of a finger.

**CAUSES.**—When the head-ach proceeds from a hot bilious habit, the pain is very acute and there is throbbing, with a considerable heat of the part affected. When from a cold phlegmatic habit, the patient complains of a dull heavy pain, and has a sense of coldness in the part. This kind of head-ach is at times attended with some degree of stupidity.

Whatever obstructs the free circulation of blood through the vessels of the head, may occasion a head-ach. In persons of a full habit, the head-ach often proceeds from the suppression of customary evacuations, as bleeding at the nose, sweating of the feet, &c. It may likewise proceed from any cause that determines a great flow of blood towards the head, as coldness of the extremities, or hanging down the head for a long time. Whatever prevents the return of blood from the head,

will occasion a head-ach; as looking obliquely at one object, wearing any thing tight about the neck, and the like.

When the head-ach proceeds from a running at the nose suddenly ceasing, there is a heavy, obtuse, pressing pain in the fore-part of the head, in which there is such a sense of weight, that the patient can scarcely hold it up.

Sometimes the head-ach proceeds from the repulsion or retrocession of the gout, the small pox, measles, itch, or other eruptive diseases. That species of the complaint which affects one side of the head only, generally proceeds from indigestion. Inanition, or emptiness, will also occasion head-ach, as in nurses who give suck, without taking a sufficient quantity of solid food.

There is likewise a fixed, constant, and almost intolerable head-ach, which occasions a great debility both of body and mind, prevents sleep, destroys the appetite, causes a vertigo, or giddiness of the head, dimness of sight, a noise in the ears, convulsions, epileptic fits, sometimes vomiting, costiveness, and coldness of the extremities.

**MODE OF TREATMENT.**—When the head-ach is owing to excess of blood, or a bilious constitution, bleeding is necessary; and the operation should be repeated if the case demands it. Cupping also, or the application of leeches to the temples, and behind the ears, will be of service. Afterwards a blister may be applied to the neck, behind the ears, or to any part of the head that is most affected. In some cases it will be proper to blister the whole head. In persons of a gross habit, issues or perpetual blisters will be found useful. The bowels ought likewise to be kept open by gentle laxatives.

But when there is a dull, heavy, continual pain in the head, which will neither yield to bleeding nor gentle laxatives, more powerful purgatives are necessary, as pills made of aloes, jalap, or the like. It will be necessary in this case to blister the whole head, and to keep the back part of the neck open, for a considerable time, by a seton or perpetual blister.

When the head-ach is occasioned by the stoppage of a

running at the nose, the patient should frequently apply a bottle of volatile salts to that organ; he may likewise take snuff, or any thing that will irritate the nose, so as to promote a discharge from it.

That form of the complaint which affects only one side of the head, especially when periodical, is generally owing to a foulness of the stomach, for which gentle vomits must be administered, with purges of Epsom salts or jalap. After the bowels have been sufficiently cleared, chalybeate waters, and such bitters as strengthen the stomach, will be necessary.

When the head-ach is so intolerable as to endanger the patient's life, or is attended with continual watching, and delirium, recourse must be had to opiates. These, after proper evacuations by clysters or mild purgatives, may be applied both externally and internally. The affected part may be rubbed with spirits of camphor and laudanum combined. The patient may, at the same time, take twenty drops of laudanum, in a cup of valerian or penny-royal tea, twice or thrice a day. This is only to be done in cases of extreme pain. Proper evacuations ought always to accompany and follow the use of opiates.

When the patient cannot bear the loss of blood, his feet ought frequently to be bathed in lukewarm water, and well rubbed with a coarse cloth. Plasters of mustard or hors-radish ought likewise to be applied to them. This course is peculiarly necessary when the pain proceeds from a gouty affection of the head.

When the head-ach is occasioned by great heat, hard labour, or violent exercise of any kind, it may be allayed by cooling medicines, as the saline draughts with nitre.

A little ether dropped into the palm of the hand, and applied to the forehead, will sometimes remove a violent pain in the head.

The cool regimen in general is to be observed. The diet ought to consist of emollient substances which will tend to keep the body open, as apples boiled in milk, spinage, turnips, and the like. The drink ought to be diluting, as barley water and infusions of mild mucilaginous vegetables. The feet and legs ought to be kept warm, and frequently bathed in tepid water; the forehead should be



moistened with cool water and vinegar, and the patient ought as much as possible to keep in an erect posture, and not to lie with his head too low.



## OF THE TOOTH-ACH.



This disease needs no description. It in some respects resembles rheumatism, and often succeeds pains of the shoulders and other parts of the body.

**CAUSES.**—It may proceed from obstructed perspiration, or any of the causes of inflammation, from neglecting some part of the usual coverings of the head; or from sitting with the head bare near an open window, or exposing it in any way to a current of cold air. Food or drink taken either too hot or too cold, is very hurtful to the teeth. Great quantities of sugar, or other sweetmeats, are likewise hurtful. Nothing is more destructive to the teeth than cracking nuts, or chewing any kind of hard substances. Picking the teeth with pins, needles, or any thing that may hurt the enamel with which they are covered, does great mischief, as the tooth, whenever the air gets into it, will certainly decay. Pregnant women are very subject to the tooth-ach, especially during the first three or four months. The more immediate cause of the tooth-ach is a rotten or *carious* tooth.

**MODE OF TREATMENT.**—In order to relieve the tooth-ach, we must first endeavour to lessen the quantity of blood in the part affected. This may be done by mild purgatives, scarifying the gums, and bathing the feet fre-

quently with warm water. The perspiration ought likewise to be promoted, by drinking freely of weak wine-whey, or other diluting liquors, with small doses of nitre. If this fails, and the pain and inflammation still increase, a suppuration may be expected; to promote which, a toasted fig should be held between the gum and the cheek; and bags filled with boiled chamomile flowers, flowers of elder, or the like, may be applied near the part affected, with as great a degree of warmth as the patient can bear, and renewed as they grow cool: the patient may likewise receive the steam of warm water into his mouth, through an inverted funnel, or by holding his head over the mouth of a tea-pot filled with warm water.

Opiates often relieve the tooth-ach. For this purpose a little cotton wet with laudanum, may be held between the teeth. If there be a hollow tooth, a small pill, made of equal parts of camphor and opium, put into the hollow, is often serviceable. When this cannot be had, the hollow tooth may be filled with cotton, wax, or any other substance that will stick in it, and keep out the external air.

Few applications give more relief in the tooth-ach than blisters applied behind the ears, and made so large as to cover a great part of the lower jaw.

When a tooth is carious, it is often impossible to remove the pain without extracting it; it is prudent to draw it soon, lest it should affect the rest. Tooth-drawing, like bleeding, is very much practised by unskilful persons: the operation, however is not without danger, and ought always to be performed with care. A person unacquainted with the structure of the parts, will be in danger of hurting the jaw-bone, or of drawing a sound tooth instead of a rotten one.

Keeping the teeth clean tends to prevent the tooth-ach. The best method is to clean them every day with a soft brush, either using cold water alone, or a combination of finely powdered charcoal, myrrh, and Peruvian bark. All hard brushing and scraping of the teeth, unless performed with great care, does mischief.

## OF THE EAR-ACH.



THIS disorder chiefly affects the membrane which lines the inner cavity of the ear. It often occasions great restlessness, anxiety, and even delirium. Epileptic fits, and other convulsive disorders, have been brought on by extreme pain in the ear.

The ear-ach may proceed from any of the causes which produce inflammation. It often proceeds from a sudden suppression of perspiration, or from the head being exposed to cold when covered with sweat; or from worms, or other insects getting into the ear, or being bred there; or from any hard body sticking in the ear. Sometimes it proceeds from the translation of morbid matter to the part. This often happens in the decline of malignant fevers, and occasions deafness, which is generally reckoned a favourable symptom.

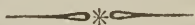
When the ear-ach proceeds from insects, or any hard body sticking in the ear, every method must be taken to remove them as soon as possible. The membranes may be relaxed by dropping into the ear oil of sweet almonds, or olive oil, and the foreign body must be extracted by art. Insects which get into the ear, sometimes come out of their own accord, upon oil being poured into it.

When the pain of the ear proceeds from inflammation, it must be treated like other topical inflammations, by a cooling regimen and opening medicines. Bleeding, at the beginning, or cupping on the side of the neck, will be proper. The ear may likewise be fomented with steam of warm water, or flannel bags filled with boiled chamomile flowers may be applied to it warm; or bladders filled with warm milk and water. An excellent method of fo-

menting the ear, is to apply it close to the mouth of a tea-pot filled with warm water, or a strong decoction of chamomile flowers.

The patient's feet should be frequently bathed in lukewarm water, and he ought to take small doses of nitre and cream of tartar, half a dram of the latter, and ten grains of the former three times a day. His drink may be whey, or a decoction of barley and liquorice, with figs or raisins. The parts behind the ear ought frequently to be rubbed with camphorated spirits, or a little of the volatile linament, (*see Dispensatory.*)

When the inflammation cannot be discussed, a poultice of bread and milk, or roasted onions, may be applied to the ear, and frequently renewed, till the abscess breaks, or can be opened. Afterwards the humours may be diverted from the part by gentle laxatives, blisters, or issues; but the discharge must not be suddenly dried up by any external application.



## PAIN OF THE STOMACH.



THIS may proceed from various causes, as indigestion, wind, the acrimony of the bile, sharp, acrid, or poisonous substances taken into the stomach. It may likewise be occasioned by worms, the stoppage of customary evacuations, a translation of gouty matter to the stomach, and bowels.

Women in the decline of life are very liable to pains of the stomach and bowels, especially such as are afflicted with hysteric complaints. It is likewise very common to hypochondriac men of sedentary and luxurious



habits. In such persons, it often proves so extremely obstinate, as to baffle all the resources of art.

When the pain of the stomach is most violent after eating, there is reason to suspect that it proceeds from some fault either in the digestion or the food. In this case, the patient ought to change his diet, till he finds what kind of food agrees best with his stomach, and should continue chiefly to use it. If a change of diet does not remove the complaint, the patient should take a gentle vomit, and afterwards a dose or two of rhubarb or magnesia. He ought likewise to take an infusion of chamomile flowers, quassia or gentian, either in wine or water. We have often known exercise remove this complaint, especially sailing, or a long journey on horseback, or in a carriage.

When a pain of the stomach proceeds from flatulency, the patient is constantly belching up wind, and feels an uneasy distention of the stomach after meals. This is a most deplorable disease, and is seldom thoroughly cured. In general, the patient ought to avoid all windy diet, and every thing that sours on the stomach.

This complaint likewise, may be greatly relieved by labour, especially digging, reaping, mowing, or any kind of active employment, by which the bowels are alternately compressed or dilated. "The most obstinate case of this kind," says Dr. Buchan, "I ever met with, was in a person of a sedentary occupation, whom I advised, after he had tried every kind of medicine in vain, to turn gardener; which he did, and has ever since enjoyed good health."

When a pain of the stomach is occasioned by the swallowing of acrid or poisonous substances, they must be discharged by vomiting; and to effect this object, the most powerful emetics will often be required; sometimes the milder will answer.

When a pain of the stomach proceeds from a translation of gouty matter, cordials are necessary, as generous wines, French brandy, or good whiskey. Some in this case have drank large quantities of ardent spirits, in a short time, without being in the least intoxicated, or even feeling the stomach warmed by it. It is impossible to

ascertain the quantities necessary upon these occasions. This must, in a great measure, be left to the feelings and discretion of the patient. When there is an inclination to vomit, it may be promoted by drinking warm water, or an infusion of chamomile flowers.

If a pain of the stomach proceeds from the stoppage of customary evacuations, bleeding will be necessary, especially in very full habits. It will likewise be of use to keep the body gently open by mild purgatives, as castor oil, or senna tea. When this disease attacks women in the decline of life, after the stoppage of the menses, an issue made in the leg or arm, will be of peculiar service.

When the disease is occasioned by worms, they must be destroyed or expelled by the means recommended in an article upon this subject, under the head of diseases of children.

When a weakened stomach and bad digestion occasion flatulencies, the elixir of vitriol will be of singular service. Fifteen or twenty drops of it may be taken in a glass of wine or water, twice or thrice a day.

Persons afflicted with flatulency are generally uneasy unless they be taking some purgative medicines; these, though they may give immediate ease, weaken and relax the stomach and bowels, and consequently increase the disorder. Their best method is to mix purgatives and stomachics together. Equal parts of bark and rhubarb may be infused in brandy, wine, or good whiskey, and taken in such quantities as will keep the body gently open.

## OF THE DROPSY.



THE dropsy is a preternatural swelling of the whole body, or some part of it, occasioned by a collection of watery fluid. It is distinguished by different names, according to the part affected, as the *anasarca*, or collection of water under the skin; the *ascites*, or a collection of water in the belly; the *hydro-thorax*, or dropsy of the breast; and the *hydrocephalus*, or dropsy of the brain. This last will be mentioned among the diseases of children.

CAUSES.—The dropsy is often owing to an hereditary disposition. It may proceed from drinking ardent spirits, or other strong liquors. Great drinkers frequently die of a dropsy. It often proceeds from excessive evacuations, as frequent and copious bleeding, strong purges often repeated, or from frequent salivations. The sudden stoppage of customary or necessary evacuations, such as the menses, or the hæmorrhoids, may likewise cause a dropsy.

Dr. Buchan says he has known the dropsy occasioned by drinking large quantities of cold liquor when the body was heated by violent exercise. A low, damp, or marshy situation is likewise a frequent cause of it. Hence it is a common disease in moist, flat, fenny countries. It may also be brought on by a long course of poor watery diet, or of any aliment that contains but little nourishment, and is hard of digestion. It is often the effect of other diseases, as the jaundice, a scirrhus or hardened enlargement of the liver, a violent ague of long continuance, a diarrhœa, a dysentery, or a consumption of the

lungs. In short, whatever obstructs the perspiration, or prevents the blood from being properly circulated, may occasion a dropsy.

**SYMPTOMS.**—The *anasarca* generally begins with a swelling of the feet and ancles towards night, which for some time disappears in the morning. In the evening, the parts, if pressed with the finger, will pit. The swelling gradually ascends, and occupies the trunk of the body, the arms and the head. Afterwards the breathing becomes difficult, the urine is in small quantity, and the thirst great; the body is bound, and the perspiration is greatly obstructed. To these succeed torpor, heaviness, a slow wasting fever, and a troublesome cough. This last is generally a fatal symptom, as it shews that the lungs are affected,

In an *ascites*, besides the above symptoms, there is a swelling of the belly, and often a fluctuation, which may be perceived by striking the belly on one side, while laying the palm of the other hand on the opposite. This may be distinguished from a *tympany*, or windy distention of the belly, by the weight of the swelling, as well as by the fluctuation. When the *anasarca* and *ascites* are combined, the case is very dangerous. Even a simple *ascites* seldom admits of a radical cure. In many cases all that can be done, is to let the water off by tapping, which seldom affords more than a temporary relief.

When, however, the disease comes suddenly on, and the patient is young and strong, there is reason to hope for a cure, especially if medicine be given early. But if the patient be old, has led an irregular or sedentary life, or if there is ground to suspect that the liver, lungs, or any of the viscera are unsound, there is great reason to fear that the consequences will prove fatal.

**MODE OF TREATMENT.**—In the cure of dropsy, the two leading objects are, firstly, to remove the effused fluid, and secondly, to prevent its re-accumulation.

To answer the first indication, purgatives, diuretics, and diaphoretics, are all brought into requisition. If the disease has commenced suddenly, and in a good consti-



tution, the cure may be commenced with a gentle emetic, composed of a half dram of ipecacuanha or a table spoonful of the oxymel of squills. This may be administered in the evening, to be followed on the succeeding morning by a mixture of half a dram of jalap, two drams of the cream of tartar, and six grains of calomel. If the patient is much griped, he may take occasionally, during the operation of the medicine, a tea cupful of chicken broth. In three or four days, according to circumstances, the purge should be repeated, and if the symptoms demand, a third and a fourth, with proper intervals, may be administered.

During the intervals between the doses of purgative medicines, such as are of a diuretic nature should be given. The cream of tartar, with the addition of squills, digitalis or foxglove, and nitre, will tend to increase the secretion of urine, and help to carry off a portion of the accumulated fluid. The above articles may be used in any of the following combinations. Take of cream of tartar two drams, powder of squills one grain, ginger five grains, mix them and take the powder morning and evening, dissolved in a tea cup full of an infusion of juniper berries; or take powder of squills one grain, foxglove one grain, cream of tartar one dram; mix them and take this dose morning and evening, in the same vehicle as the former. Or take of nitre one scruple, powder of squills one grain, ginger five grains, mix them and give this dose twice a day. To increase the efficacy of these articles, diluting liquors may be drank freely at the same time.

To promote perspiration, the patient may use a decoction of seneka snake-root, as directed above, or he may take a table spoonful of the Spiritus Mindereri two or three times a day, (*see Dispensatory.*)

Concerning diaphoretics, however, Dr. Thomas remarks, that he has ever found this class of medicines too inert in this disease; and with the exception of the vapour bath, he has never placed any confidence in them. "In most cases," continues he, "I have succeeded, by administering an active purgative every four or five days, followed up, during the intervening ones, by diuretic medicines and diluting liquors of the like nature."

When the legs and feet become very much distended with the effused fluid, it is by some considered necessary to scarify them, so as to give vent to a portion of the watery accumulation. But great care should be taken to make them very superficial, as deep punctures or incisions in dropsical parts are apt to become gangrenous, and mortify.

Having made light scarifications, in order to prevent unpleasant consequences, the limbs may be well fomented with flannel cloths wrung out of a warm infusion of chamomile flowers, to assist in discharging the fluid.—Should the wounds shew any tendency to mortification, the spirits of camphor and diluted oil of turpentine may be rubbed over the part, and afterwards some stimulating ointment applied.

Scarifications, as well as blisters, which have also been proposed for the same purpose, are always attended with more or less danger, and only in extreme cases are they admissible. Before we resort to either of these measures, it will be proper to endeavour to excite the absorbent vessels of the part; to remove the effused fluid, by applying a muslin roller, with moderate tightness, to the part affected—beginning at the feet, and carrying it as high up as any watery accumulations are manifest.

The same evacuant and diuretic course must be observed in *hydro-thorax*, or water in the chest, as have been recommended in the other forms of dropsy; but when these means fail, an opening must be made between the ribs by a skilful surgeon, that the water may be thus drawn off. This plan, however, should never be pursued, until every other measure has failed.

In an *ascites*, when the disease does not evidently and speedily give way to purgative and diuretic medicines, the water ought to be let off by tapping. This is a very simple and safe operation, and would often succeed if it were performed in due time, before the system became too much debilitated. Dr. Buchan, on this subject, remarks, that “the very name of an operation is dreadful to most people, and they wish to try every thing before they have recourse to it. This is the reason why tapping so seldom succeeds to our wish. I have had a

patient who was regularly tapped once a month, for several years, and who used to eat her dinner as well after the operation as if nothing happened. She died at last, rather worn out by age than by disease."

If the complaint has arisen in a weak and enfeebled frame of body, after the evacuation of the water, the patient is to be put on a course of strengthening medicines, as the bark, the elixir of vitriol, and the warm aromatics.

The diet of dropsical persons, unless where there is an inflammatory action, should consist, for the most part, of digestible meats, either roasted or boiled, or stewed down into soup or rich broth, as likewise vegetables of a pungent and aromatic nature, as horseradish, asparagus, onions, garlic, mustard, and spices.

The drink during meals, may consist of wine and water, or weak gin and water: the ordinary drink during the day, may be an infusion of juniper berries made pleasant with honey or sugar, or water pleasantly acidulated with cream of tartar. The old practice of prohibiting even the moderate use of liquors in this disease, was very erroneous; indeed, these are necessary not only to allay thirst, which is often a most distressing symptom, but also to assist the diuretic medicines in their operation on the kidneys.

Exercise is of the greatest importance in a dropsy. If the patient be able to walk or labour, he ought to continue these exercises as long as he can bear them. If he is not able thus to exert himself, he must ride on horseback, or in a carriage; for the degree of labour must be proportioned to his strength. His bed ought to be hard, and the air of his apartments warm and dry. If he lives in a damp country, he ought to be removed to a dry one, and if possible, into a warmer climate. In a word, every method should be taken to promote the perspiration and urine, and to brace the system. For this purpose it will likewise be proper to rub the patient's body two or three times a day, with a hard cloth or flesh-brush; and he ought constantly to wear flannel next the skin.

## OF THE GOUT.



Few diseases show the imperfections of the medical science, or set the advantages of exercise and temperance in a stronger light, than the complaint under consideration.

**CAUSES.**—Excess and idleness are the most frequent sources of gout; yet there are many other things which contribute to its production, even in those who are not influenced by either of the above causes. Where an hereditary predisposition exists, a paroxysm may be induced by intense study, too free a use of acidulated liquors, night watching, grief or uneasiness of mind, an obstruction or defect of any of the customary discharges, as the menses, sweating of the feet, general perspiration, &c. Women are less subject to the disease than men, though no sex or age is entirely exempt from it.

**SYMPTOMS.**—A fit of the gout is generally preceded by indigestion, belching of wind, a slight head-ach, sickness, and sometimes vomiting. The patient complains of weariness and dejection of spirits, and has often a pain in the limbs, with a sensation as if wind or cold water were passing down the thigh. The appetite is often remarkably keen a day or two before the attack, and there is a slight pain in passing urine, and occasionally an involuntary shedding of tears. These symptoms are sometimes more violent, especially upon the near approach of a fit; and some observe, that as is the fever which ushers in the gout, so will the fit be: if the fever be short and



sharp, the fit will be so likewise; if it be feeble, long, and lingering, the fit will be such also. But this observation can only hold with respect to very regular fits of the complaint.

The regular gout generally makes its attack in the spring or beginning of winter, in the following manner: About two or three in the morning, the patient is seized with a pain in his great toe, sometimes in the heel, and at other times in the ankle or calf of the leg. The pain is accompanied with a sensation as if cold water were poured upon the part, which is succeeded by a shivering, with some degree of fever. Afterwards the pain increases, and locating itself in the small joints of the foot, the patient experiences all the extremes of torture. The parts affected at length become so exquisitely sensible, that the sufferer cannot bear to have them touched, or even permit any person to walk across the room.

The patient is generally in exquisite pain for twenty-four hours from the commencement of the paroxysm; he then becomes easier, the part begins to swell, appears red, and is covered with a little moisture. Towards morning he drops asleep, and a gentle sweat comes on. This terminates the first paroxysm, a number of which constitutes a fit of the gout; which is longer or shorter according to the age, strength, season of the year, and disposition of the body to this disease.

The patient is always worse towards night, and easier in the morning. The paroxysms generally grow milder every day, until at length the disease is carried off by perspiration, urine, and the other evacuations. In some patients, a few days; in others, weeks; and in some, months are required to finish the fit. Those whom age and frequent attacks of the gout have greatly debilitated, seldom get free from it before the approach of summer, and sometimes not until that season be pretty far advanced.

**MODE OF TREATMENT.**—During the paroxysm, if the patient be young and strong, his diet ought to be low and cooling, and his drink of a diluting nature; but where the constitution is weak, and the patient has been accustomed to live high, he must keep nearly to his usual

diet, and occasionally take a glass of good wine. Wine-whey is a very proper drink in this case, as it promotes the perspiration without greatly heating the patient. It will likewise be proper to give, at bed time, a tea spoonful of the volatile tincture of guaiacum in a large draught of warm wine-whey. This will tend to promote perspiration throughout the night.

As the most safe and efficacious method of removing a fit of gout is by perspiration; this ought to be kept up by all means, especially in the affected part. For this purpose, the leg and foot should be wrapt in flannel, fur, or wool. "This last," says Dr. Buchan, "seems to answer the purpose better than any thing else. The people in England look upon wool as a kind of specific in the gout. They wrap a great quantity of it about the leg and foot affected, and cover it with a skin of soft dressed leather. This they suffer to continue for eight or ten days, and sometimes for a fortnight or three weeks, or longer, if the pain does not cease. I never knew any external application answer so well in the gout. I have often seen it applied when the swelling and inflammation were very great, with violent pain, and have found all these symptoms relieved by it in a few days. The wool is generally greased and carded. They choose the softest which can be had, and seldom or never remove it till the fit be entirely gone off."

The patient ought to be kept quiet and easy during the attack. Every thing that affects the mind disturbs the paroxysm, and tends to throw the gout upon the more vital parts. All external applications that repel the disease, are to be avoided. They do not cure the complaint, but remove it from a safer to a more dangerous part of the body, where it often proves fatal. A fit of the gout is nature's method of removing something that might prove destructive to the body, and all that we can do, with safety, is to promote her intentions, and assist her in expelling the enemy in her own way. Evacuations by bleeding, stool, &c. are likewise to be used with caution; they do not remove the cause of the disease, and sometimes by weakening the patient, prolong the fit; but, where the constitution is able to bear it, it will be of use

to keep the body gently open by diet, or even mild laxative medicines.

Many things indeed, will shorten a fit of the gout; and some will drive it off altogether; but nothing has yet been found which will do this with safety to the patient. When however, the pain is very great, and the patient restless, thirty or forty drops of laudanum, more or less, according to the violence of the symptoms, may be taken at bed time. This will ease the pain, procure rest, promote perspiration, and forward the crisis of the disease.

After the paroxysm is over, the patient ought to take a gentle dose or two of the tincture of rhubarb, or some other warm stomachic purge. He should also drink a weak infusion of some stomachic bitters in wine, as the Peruvian bark, with the Virginia snake-root, and orange-peel. The diet at this time, should be light, but nourishing, and gentle exercise ought to be taken on horseback, or in a carriage.

When the paroxysm has subsided, it is in the patient's power to do many things towards preventing a return of the disorder, or rendering the fit, if it should return, less severe. This, however, is not to be attempted by medicine. "I have frequently known the gout," says Dr. Buchan, "kept off for several years, by the bark and other astringent medicines; but, in all cases, where I had occasion to see this tried, the persons died suddenly, and to all appearance, for want of a regular fit of the gout; which, to some persons in the decline of life, is rather salutary than hurtful."

Though it may be dangerous to stop a fit of the gout by medicine, yet if the constitution can be so changed by diet and exercise, as to lessen or totally prevent its return, there certainly can be no danger in following such a course. The whole habit may be altered by a proper regimen, so as quite to eradicate this disease; and those only who have sufficient resolution to persist in such a course, have reason to expect a cure.

The plan we would recommend for preventing the gout is, in the first place, universal temperance; in the next place, sufficient exercise. Going to bed early, and rising betimes, are also of great importance. It is like-

wise proper to avoid night studies, and all intense thought. The supper should be light and taken early. Strong liquors, especially wines and sour punch, are by no means to be indulged in.

We would likewise recommend repeated doses of calcined magnesia and rhubarb, to be taken every spring and autumn; and afterwards the stomachic bitters, as infusions of gentian and chamomile flowers, or of any wholesome bitter vegetable, that is most agreeable to the patient, may be drank for two or three weeks during spring and fall. An issue or perpetual blister has also a tendency to prevent the gout.

Though there is no necessity for medicine during a regular attack of the complaint, yet when it leaves the extremities, and falls on some of the internal parts, proper applications to recal and fix it, become absolutely necessary. When the gout affects the head, the pain of the joints ceases, and the swelling disappears, while either severe head-ach, drowsiness, trembling, giddiness, convulsions, or delirium comes on. When it seizes the lungs, great oppression, with cough and difficulty of breathing, ensue. If it attacks the stomach, extreme sickness, vomiting, anxiety, pain in the epigastric region, and a total prostration of strength will be the consequence.

When the gout attacks the head or lungs, every method must be taken to locate it in the feet. These must be frequently bathed in warm water, and stimulating cataplasms applied to the soles. Blisters ought likewise to be applied to the ankles or calves of the legs. Bleeding in the feet or ankles is also advisable, and warm stomachic purges should also be administered. The patient ought to keep in bed if there be any signs of inflammation, and should be very careful not to catch cold.

If it attacks the stomach with a sense of cold, the warmest cordials are necessary, as strong wine boiled up with cinnamon or other spices, cinnamon water, peppermint water, and even brandy or whiskey. The patient should keep to his bed, and endeavour to promote a sweat by drinking warm liquors; and if he should be troubled with nausea or inclination to vomit, he may drink cha-



momile tea, or any thing that will evacuate the stomach freely.

When the gout attacks the kidneys, and imitates gravel pains, the patient ought to drink freely of a decoction of mucilaginous vegetables. and to have the parts fomented with warm water. An emollient clyster ought likewise to be given, and afterwards an opiate. If the pain be very violent, twenty or thirty drops of laudanum may be taken in a cup of the decoction.

Persons who have had the gout, should be very attentive to any complaints that may happen to them, about the time they have reason to expect a return of the fit. The gout imitates many other disorders, and by being treated improperly, is often diverted from its regular course, to the great danger of life.

Those who never had the gout, but who, from their constitution or manner of living, have reason to expect it, ought to be very circumspect with regard to its first approach. If the disease, by wrong conduct, or improper medicines, is diverted from its proper place, the patient may ever after be tormented with head-achs, coughs, or pains of the stomach and intestines; and fall at last a victim to its attack, upon some part more vital than that in which it was originally located.



## OF THE RHEUMATISM.



THIS disease has often a resemblance to the gout. It generally attacks the large joints with exquisite pain, and is sometimes attended with inflammation and swelling. It is most common in the spring. and towards the

end of autumn. It is usually distinguished into acute and chronic; or the rheumatism with and without a fever.

**CAUSES.**—The causes of rheumatism are frequently the same as those of an inflammatory fever, viz. an obstructed perspiration, the immoderate use of strong liquors, sudden changes of the weather, and all quick transitions from heat to cold. Very obstinate rheumatisms have likewise been brought on by persons, not accustomed to it, allowing their feet to continue long wet. The same effects are produced by wet clothes, damp beds, sitting or lying on the damp ground, travelling in the night, by excessive evacuations, or the stoppage of customary discharges. It is often the consequence of chronic affections, as the scurvy, the venereal disease, and obstinate autumnal agues.

The rheumatism prevails in cold, damp, marshy countries. It is most common among the poor, who are ill clothed, live in low damp houses, and eat coarse unwholesome food, which contains but little nourishment, and is not easily digested.

**SYMPTOMS.**—The acute rheumatism commonly begins with weariness, shivering, a quick pulse, restlessness, thirst, and other symptoms of fever. Afterwards the patient complains of flying pains, which increase by the least motion. These at length fix in the joints, which are often affected with swelling and inflammation. If bleeding be resorted to in this disease, the blood is generally found to present the same appearance as that drawn in pleurisy.

**MODE OF TREATMENT.**—In this kind of rheumatism, the treatment of the patient is nearly the same as in an acute or inflammatory fever. If he be young and strong, bleeding is necessary, which may be repeated according to the exigencies of the case; if, however, he is spare and delicate, we may substitute cupping or leeching the affected part, for blood letting from the arm. The bowels ought to be freely opened by clysters or laxative medicines: as cream of tartar or senna tea.

After the feverish symptoms have abated, if the pain still continues, the patient must keep his bed, and take such things as promote perspiration: as wine whey, with *spiritus Mindereri*, or ten grains of the Dover's powder, every five or six hours. He may likewise take at bed time, in a cup of wine whey, a dram of the cream of tartar, and half an ounce of the volatile tincture of gum guaiacum.

Warm bathing, after proper evacuations, has often a good effect. The patient may either be put into a bath of warm water, or have cloths wrung out of it and applied to the parts affected. Great care must be taken that he does not catch cold after bathing.

In acute rheumatism, the patient should be confined to a very spare and light diet, consisting of gruel, panado, bread puddings, roasted apples, and weak chicken broth. The drink should be cooling, as toast and water, thin gruel, whey, barley water, or an infusion of preserved tamarinds—all fermented liquors are to be avoided.

The chronic rheumatism is seldom attended with any considerable degree of fever, and is generally confined to some particular part of the body, as the shoulders, the back, or the loins. There is in this form of the complaint seldom any inflammation or swelling. Persons in the decline of life are most subject to the chronic rheumatism, and in such patients, it often proves extremely obstinate, and sometimes incurable. The patient, in this form of the complaint, may take a dram of the cream of tartar, and twenty grains of powdered gum guaiacum twice a day, and a tea spoonful of the volatile tincture of the gum at bed time, in wine whey. The part affected should, also, frequently be rubbed with some stimulating liniment.

This course may be continued for a week, or longer, if the case proves obstinate, and the patient's strength will permit. It ought then to be omitted for a few days, and repeated again. At the same time a blister may be applied to the seat of pain. A plaster of Burgundy pitch, worn for some time on the part affected, will often give great relief in rheumatic pains. Dr. Alexander, of Edinburgh, says, he has frequently cured very obstinate rheumatic pains, by rubbing the affected part with tinc-

ture of cantharides. When the common tincture did not succeed, he used it of a double strength. Cupping, is often very beneficial, and greatly preferable to the application of leeches.

Though this disease may not seem to yield to medicines for some time, yet they ought still to be persisted in. Persons subject to frequent returns of rheumatism, will often receive benefit from using medicines, whether they are, at the time, affected with the disease or not. The chronic rheumatism is similar to the gout in this respect, that the most proper time for using medicines to extirpate it, is when the patient is most free from the disorder.

A table spoonful of the seed of mustard may be taken twice or three times a day in a glass of water or wine. The chamomile, and several other bitters are beneficial, and may be used in the same way. No benefit is, however, to be expected from these, unless they be taken for a considerable time. Excellent medicines are often despised in this disease, because they do not perform an immediate cure; whereas, nothing would be more certain than their effect, were they duly persisted in. Want of perseverance in the use of medicines is one reason why chronic diseases are so seldom cured.

Cold bathing, especially in salt water, is often beneficial in rheumatism. We, also, recommend riding on horseback, and wearing flannel next the skin. Issues are very proper, in chronic cases. If the pain affects the shoulders, an issue may be made in the arm; but if it affects the loins, it should be put in the leg or thigh.

Persons afflicted with the scurvy are very subject to rheumatic complaints. Bitters and mild purgatives are here to be used. These may either be taken separately or together, as the patient desires. An ounce of bark, and half an ounce of rhubarb in powder, may be infused in a bottle of wine; and one, two, or three wine glasses of it taken daily, as shall be found necessary for keeping the bowels gently open. In cases where the bark itself proves sufficiently purgative, the rhubarb may be omitted.

Such as are subject to frequent attacks of the rheumatism ought to make choice of a dry, warm situation, to avoid the night air, wet clothes, and wet feet, as much



as possible. Their clothing should be warm, and they ought to make frequent use of the flesh brush.

In these cases of rheumatism, unless there be inflammatory excitement, the diet of the patient should be the same as in health; but when fever is present it should be the same as advised in the acute form.



## OF THE SCURVY.



THIS disease prevails chiefly in cold northern countries, especially in low, damp situations, near large marshes, or great quantities of stagnating water. It, also, often proves fatal to sailors on long voyages, particularly in ships that are not properly ventilated, have many people on board, or where cleanliness is neglected.

It is not necessary to mention the different species into which this disease has been divided, as they differ from one another chiefly in degree. What is called the *land scurvy*, however, is seldom attended with those highly malignant symptoms which appear in patients who have been long at sea, and which, we presume, are rather owing to confined air, want of exercise, scarcity of water, and the unwholesome food eaten by sailors on long voyages, than to any specific difference in the disease.

**CAUSES.**—The scurvy is occasioned by cold, moist air; by the long use of salted or smoke-dried provisions, or any kind of food that is hard of digestion, and affords little nourishment. It may also proceed from the suppression of customary evacuations; as the menses, the hæmorrhoidal discharges, &c. It is sometimes owing to

an hereditary taint, in which case, very slight causes will excite the latent disorder. Grief, fear, and other depressing passions, have a great tendency both to excite and aggravate the disease. The same observation holds with regard to neglect of cleanliness; bad clothing; the want of proper exercise; confined air; unwholesome food; or any disease which greatly weakens the body.

**SYMPTOMS.**—This disease may be known by unusual weariness, heaviness, and difficulty of breathing, especially after motion; tenderness of the gums, which are apt to bleed on the slightest touch; an offensive breath; frequent bleeding at the nose; difficulty of walking; sometimes a swelling, and sometimes a falling away of the legs, on which there are livid, yellow, or violet coloured spots; the face is generally of a pale or leaden colour. As the disease advances, other symptoms appear; as rottenness of the teeth, hæmorrhages, or discharges of blood from different parts of the body, foul obstinate ulcers, pains in various parts, especially about the breast, and dry scaly eruptions all over the body. At last, a wasting, or hectic fever comes on, and the patient is often carried off by a dysentery, a diarrhæa, a dropsy, the palsy, fainting fits, or a mortification of some part of the bowels.

**MODE OF TREATMENT.**—The most probable way of curing this disease is by pursuing a course directly opposite to that which produced it. As it is occasioned by errors in diet, air, or exercise; it only can be removed by a proper attention to these important articles.

If the patient has been obliged to breath a cold, damp, or confined air, he should be removed, as soon as possible, to a dry, open, and moderately warm one. If there is reason to believe that the disease proceeds from a sedentary life, or depressing passions, as grief and fear, he must take, daily, as much exercise in the open air as he can bear, and his mind should be diverted by cheerful company, and other amusements. Nothing has a greater tendency either to prevent or remove this disease, than constant cheerfulness. Persons afflicted with this complaint, are generally, very much depressed in spirits.

When the scurvy is brought on by a long use of salted provisions, the proper medicine is a diet consisting, chiefly, of fresh vegetables: as oranges, apples, lemons, limes, and tamarinds—cabbage, spinage, lettuce, parsley, celerery, radishes, &c. The use of these, with milk, new bread, and fresh beer or cider, will seldom fail to remove this form of the complaint if taken before it is too far advanced; but to have this effect, they must be persisted in for a considerable time. When fresh vegetables cannot be obtained, pickled or preserved ones may be used; and where these cannot, recourse must be had to mineral or vegetable acids. All the patient's food and drink, should, in this case, be sharpened with cream of tartar, elixir of vitriol, or vinegar.

The most proper drink in the scurvy is whey or butter milk. When these cannot be had, sound cyder, ale, porter, or spruce beer, may be freely used; and, if there be great prostration of strength, a proper quantity of wine may be daily allowed, diluted with a little water.

But besides paying strict attention to diet, cleanliness should not be forgotten; the apartments of the sick should be purified and freely ventilated, and the patient compelled to take daily exercise in the open air.

If the patient is afflicted with acute pains, which deprive him of rest, a grain of opium, or thirty drops of laudanum may be given before retiring.

If there be much difficulty of breathing, a blister may be applied to the breast. Should the gums ulcerate, the frequent use of gargles will be required. These may be composed of a decoction of bark, with a few drops of the elixir of vitriol and tincture of myrrh. Ulcers on the surface of the body may be dressed with lint, on which a mixture of the decoction of bark and tincture of myrrh has been poured, in preference to any oily or greasy preparations, which are apt to prove hurtful.

If costiveness prevails, some gentle laxative, as cream of tartar, may be given. Should the skin be dry and parched, we may excite a gentle perspiration by the administration of eight or ten grains of the Dover's powders morning and evening. Where the gums are spongy, and the teeth become loose, or discharges of blood take place,

the evil should be remedied by the application of solutions of alum, the blue or white vitriol, or a strong decoction of galls.

To strengthen the general habit, in addition to pure temperature, dry air, regular exercise, nutritive diet of vegetables, and fresh animal food, with a moderate allowance of wine, a course of tonic medicines should be advised: the preparations of iron, or a decoction of Peruvian bark, together with a few drops of the elixir of vitriol, are the most strengthening, and should be freely used.

Where the complaint is obstinate, and does not yield to the above specified mode of treatment, from the half of a grain to a grain of calomel should be given two or three times a day, with a view to its alterative effect upon the system; and the patient should, at the same time, use freely the compound decoction of sarsaparilla, or Lisbon diet drink, (*see Dispensatory.*)

That form of the disease known by the appellation of the land scurvy, in which eruptions are scattered over the surface of the body, the patient should abstain from all salted animal food, and confine himself in a great measure, to fresh vegetables, and a milk diet. Dr. Buchan says, he has seen very extraordinary effects in the land scurvy, from a milk diet. This preparation of nature, which, in fact, consists of a mixture of vegetable and animal properties, is most fit for restoring, in this complaint, a decayed constitution.



## OF VENEREAL DISEASES.



It will be necessary to state, in the first place, that the virulent gonorrhœa, or *clap*, and the venereal complaint, which is consequent to and includes chancre, or the *pox*, are two separate and distinct diseases, and never run into each other, although a patient may have both at the same time.

The celebrated Benjamin Bell, of Edinburgh, attempted to demonstrate this fact in the year 1792, and the most intelligent physicians are now convinced, by experience, that his views were accurate.

Still, there are some, deemed able medical men, but mere quacks, who do not scruple to give mercury for the clap and its consequences. This mode of treatment answers well to swell the doctor's bill, but is injurious to the patient.

It is true, that if a clap be improperly treated, it may be accompanied with or followed by a swelled testicle, a sympathetic bubo in the groin, or an inflammation of the bladder; but these have no more affinity to the pox, than has the same kind of swelling in the groin or under the arm which is caused by an inflamed ankle, or a felon on the finger.

Gonorrhœa and syphilis require very different modes of treatment, and the influence of mercurial action on the system, which is indispensable in the latter, is useless in the former, and uniformly injurious.

These diseases are not so formidable as generally supposed, if they be taken in time, and treated judiciously;

but delay, here, most emphatically breeds danger, and there is no safety in a moments remission of vigilance until the last symptoms are eradicated.

## OF THE VIRULENT GONORRHŒA, OR CLAP.

THIS is a discharge of matter from the urinary passage, which passage will, hereafter, for the sake of brevity, be often termed the *urethra*, and is most frequently consequent to co-habitation with a diseased person. Or it may be induced without the act of coition, by an application of the contagious cause to the orifice of the urethra. There have been some instances of this disease being contracted by sitting in privies, the boards of which were contaminated with the poison.

**SYMPTOMS.**—A clap sometimes appears in a few hours after exposure to infection; at other times it does not manifest itself for several weeks, but most usually between the third and seventh day. It is generally preceded by an itching about the termination of the urethra, extending along towards the testicles, and is accompanied by a burning sensation and a desire to make water frequently. The matter is, at first, often whitish, but shortly becomes of a dark yellowish colour, with a greenish tinge. Involuntary and painful erections are common, with, also, unpleasant sensations in the testicles. The disease has been known to extend up into the bladder. The discharges, however, in common cases, is poured out from the inflamed surface of the urethra, and the inflammation seldom extends more than an inch and a half back from the external orifice.

**MODE OF TREATMENT.**—If the patient be of a full habit of body, and the first symptoms are accompanied with much inflammation, bleeding and a dose of salts are advisable; it is important, indeed, that the bowels be kept moderately open through the whole course of the disease. European surgeons recommend, with a view to guard against inflammation of the testicles, that they

should be supported by a bag or truss so long as there remains any inflammation in the urethra. There is no doubt but that this practice is correct.

One piece of advice, apparently simple, but of much importance, as tending to prevent unpleasant consequences, should be scrupulously observed: it is to dip the head of the penis, and that portion of it which is usually covered with the prepuce or loose skin, three times daily, in water as warm as can be comfortably endured, washing it well, but without rubbing or irritating the part. As the lips of the urethra will be in an inflamed state, care should be taken to prevent friction against the clothing.

The diet ought to be moderate, but not too sparing, and all spirituous liquors, are, if possible, to be avoided, having an eye to general health and constitutional habits.

The erroneous recommendation frequently given to drink gin, is productive of much suffering, and frequently protracts the disease, thus laying a foundation for gleet. This liquor, it is true, owing to the oil of juniper berries combined with it in distillation, has a tendency to increase the flow of urine, and acts as a stimulant on the diseased part. If spirits must be drank, the preference should be given to gin, but it is best omitted, especially in systems unused to such a powerful stimulus.

Exercise is injurious, particularly riding on horseback, and the person who wishes to be cured soon and safely, will do well in keeping quiet as possible.

Bleeding and a dose of salts have been already recommended, if there be a considerable disposition to inflammatory action. But should the bowels, at the commencement of this disease, be moderately loose, the skin cool and moist, and the general health good, there is no necessity for either bleeding or purging.

Twenty drops of balsam copaiva ought to be taken four times daily, in a wine glass half full of water; or it may be dropped on loaf sugar: if it causes griping or looseness, one grain of opium should be taken every night in a pill. If balsam copaiva, thus administered, disagrees with the stomach, the following mixture may be

used: take balsam copaiva, three drams; sweet spirits of nitre, half an ounce; gum arabic, two drams; laudanum, one dram; water, three ounces—to be mixed in a mortar, the dose a table spoonful three times a day.

If there are evidences of considerable inflammation in the urethra, and a burning pain after the emission of urine, the patient, at the same time that he begins to use the balsam copaiva, should commence with the following injection, which is to be repeated six times in twenty-four hours: take sugar of lead, sixteen grains; opium, three grains; water, half a pint. This should be well rubbed with at first a small quantity of water in a mortar, the rest to be added by degrees. The whole of the opium will not dissolve, but it is better than laudanum for the purpose intended. A person using an injection, should be cautious to prevent the injected fluid from entering the bladder.

So soon as the inflammation begins a little to subside, which will often be in twenty-four, or forty-eight hours, the first injection should be discontinued, and the following one used six times in every twenty-four hours: take white vitriol, thirteen grains; powdered gum arabic, fifteen grains; water, half a pint—to be rubbed well together in a mortar, with at first a small quantity of water, the remainder to be added gradually.

The quantity of balsam copaiva, first directed, may be increased until one hundred and thirty drops are taken daily, being always careful to guard against purging.

If erections in the night are troublesome and painful, twenty grains of sugar of lead are to be dissolved in four ounces of water, and four ounces of vinegar, and a linen rag dipped in the solution when cold, to be wrapped around the member, first being careful to draw back the loose skin; this rag should be moistened afresh with the solution every half hour.

On the fifth day after the commencement of this course, should the discharge not be considerably diminished, and the colour whiter, the following injection may be used, for it is not advisable to administer any one injection longer than three days, unless it is evidently doing good. as the part becomes accustomed to the action, and of



course the less impression is made: take of gum kino, powdered, 60 grains; gum arabic, powdered, half an ounce; rub these articles in a mortar, with a little water, and then add more, to the amount of half a pint.

Another excellent injection may be made for the latter stages of this disease: take half an ounce of powdered nutgalls; water, a quart—boil it down to a pint, then strain it off for use.

As a common drink, flaxseed tea, in a quart of which twenty grains of saltpetre have been dissolved, will be found useful.

Sometimes, and mostly from want of cleanliness and care, there is a soreness behind the head of the penis, and about the frænum or bridle; where this is the case, and there is much inflammation, the part should be wetted frequently with a solution of sugar of lead—twenty grains of this article being dissolved in a half pint of water.

The loose skin which may be easily drawn over the head of the penis in a healthy state, sometimes becomes, from inflammation, abrasion, or ulceration, thickened, and embraces the penis behind its head so that it cannot be drawn forward; occasionally, it embraces the head of the penis so that it cannot be drawn back. In either of these cases it is advisable for the patient to lie in bed, and cool poultices of bread and milk, containing each ten grains of sugar of lead, in solution, should be applied to the part, and changed, four times a day, washing the penis each time, carefully, with warm water, in which has been dissolved a small portion of Castile soap.

If one or both of the testicles become inflamed, enlarged, and painful, or if a sympathetic bubo forms in the groin, the patient should lie in bed. If the pulse be strong as in health, bleeding is advisable, and two or three smart purges of salts, or of jalap and cream of tartar should at all events be taken. Cloths constantly wet, with a cold solution of sugar of lead, should be kept on the affected part, and the patient ought to live low. If the bleeding and purges do not answer, the local applications should be continued, and a couple of active pukes given on successive days.

There are some who will find it, perhaps, almost impossible to keep sufficiently quiet while under the influence of this disease; such, can experience considerable benefit by wearing, especially if it be in summer, the bag which has been recommended to support the testicles.

A sparing use of the balsam or of injections ought to be continued for some days after the running has disappeared, and the person who has had the disease should return moderately and gradually to his usual habits of living, avoiding intemperance in drinking, and being cautious of indulgence in venereal pleasures.

## OF THE GLEET.

A GLEET is a colourless, uninfectious discharge of matter from the urethra; it is unattended with inflammation or a scalding after voiding urine, and is immediately owing to a debilitated state of the inner surface of the urinary passage. It may be consequent to an ill cured gonorrhœa, or caused by hard drinking, exposure, by the indulgence of the venereal appetite in coition with an uninfected person, or by any other indulgence of it soon after a gonorrhœa has been well cured.

Gleets, when suffered to run on for a length of time, have a tendency to debilitate the genital organs, and the whole system.

In this disease a tolerably generous diet is recommended; doses of balsam copaiva, where it had not been previously used to any considerable extent in claps, have often effected cures.

Twenty-five drops of the tincture of cantharides, taken three times a day, in a wine glass of water, at the same time rubbing the under part of the penis three times daily, from its termination back to the testicles, with spirits of turpentine, so as to excite considerable irritation, is, also, a plan that has proved eminently successful. If the tincture of cantharides causes pain in the kidneys, an uneasy sensation in the bladder, and a frequent desire to make water, with a burning pain whilst it passes, its use should be discontinued for a couple of days, and the pa-

tient should drink plentifully of flaxseed tea. When these symptoms are removed, the tincture should be again used in doses of fifteen drops, which may be gradually and cautiously increased.

Another improved mode is to take of the tincture of the muriate of iron, twenty drops, three times a day, in a wine glass full of thin flaxseed tea; and to inject thrice, daily, of the following preparation: alcohol, one ounce; water, eight ounces.

When the season of the year, and the health of the patient permits, the cold bath is particularly beneficial in this disease.

Injections of a strong infusion of common tea have, in several instances, cured gleans.

As gleans of long standing are sometimes obstinate, owing, in a measure, to the acquired insensibility of the urethra, it is not advisable to continue any one mode of treatment longer than a week, unless it is perceived to be beneficial. The means suggested, however, are sufficient to cure any gleet which is not kept up by ulcers or strictures. In such cases application should be made to a skilful surgeon.

The existence of a stricture in the urethra, or a diminution of its canal, in a certain place, may be known by the lessened volume of the urinary discharge, the stream being often forked, and passing off, sometimes, by drops.

## OF SYPHILIS, OR POX,

*Commencing in the first place with a Chancre.*

A CHANCRE is generally preceded by, and accompanied at first with a slight degree of itching: in many cases, however, this is not noticed, and the attention is first drawn to a very small sore, the external edge of which, is whitish, and frequently drawn a little over the cavity.

A chancre makes its appearance, sometimes, in twenty-four hours after infection, but, most generally, in eight or

ten days, although, not unfrequently, a longer period intervenes. The matter discharged by a chancre has a disagreeable smell, is generally of a dirty greenish colour, and is considerable in quantity for the size of the ulcer.

A chancre, sometimes, spreads and deepens with fearful rapidity. We saw a case in Bordeaux, where the head of the penis was nearly destroyed in three days: such instances, it is true, are not common, although in different parts of the world, and at different periods, this disease has been found much more dangerous than it generally is in this country, and almost defying all medical and surgical skill.

Sometimes, however, and, perhaps, in a majority of cases, the progress of a chancre is slow, and before it is of capacity sufficient to receive a pea, there will be symptoms of a bubo forming in the groin; occasionally more chancres than one are manifested nearly at the same time; in this case they should all be treated alike, that is, touched immediately on their first appearance with a piece of lunar caustic that has been slightly moistened in clean water. The caustic ought to be gently moved over the inner surface and edges of the ulcer, until it becomes altogether white, and then a little simple cerate is to be applied, spread on some lint.

The cerate is best made by melting together two-thirds, in bulk, of hog's lard, and one third of beeswax. This mixture, as soon as the whole is dissolved, should be taken from the fire and stirred continually until it becomes thick.

It is not a small, although a very common mistake, to suppose that chancres, after they have been burned with the caustic, should be dressed with some irritating application—it may be, perchance, a *magic powder*. The simplest dressing is the best. And it is, also, an erroneous notion, to think of destroying a chancre by any other local application, with either the same speed or safety that the caustic will ensure.

Small chancres, frequently, do not stand in need of more than one application of the caustic.

When a chancre is doing well, it may be known by its having even edges of a bluish colour, and not ridgy, and



by the matter discharged becoming thicker in consistence, and whiter; indeed, any one who has seen an extensive cut, healing gradually and safely, can form a pretty correct idea of healthy matter.

If, however, the sore has not a healthy appearance, in two, three, or four days, the caustic should be again applied, as before directed. It is, in some cases, requisite to use it several times, and often, after a number of days, to parts of the sore, whilst the remainder is doing well, and perhaps measurably healed.

When there is much inflammation attending chancres, it is best to apply bread and milk poultices; at all times the part ought to be kept clean as possible, and supported in the most comfortable position.

When a chancre first appears, it is presumed the caustic will be applied as directed; and, next, the patient should take one pill of the following prescription three times, daily, until the gums begin to feel tender, assume rather a redder appearance than in health, and there is a slight copperish taste in the mouth. Six of these pills will usually produce this effect, but it sometimes requires nine or twelve:—take calomel, twenty grains; opium, five grains; mucilage of gum arabic sufficient—rub these well together, and form into twenty pills.

When the gums become sensibly affected, the pills should be discontinued for two days at least, and afterwards, used so as to keep the gums in the state which has been defined for two weeks. If, at the expiration of that time, the chancre is well, and there are no other symptoms of the disease, the patient may feel satisfied that he is out of danger, and can, with propriety, entirely discontinue the medicine.

If a looseness comes on, while they are used in the manner directed, one or two grains of opium should be taken every night until it is checked.

Whenever any preparation of mercury operates by purging, its antivenereal efficacy is greatly, if not, entirely lost. Two of the blue pills may be considered as equal to one calomel pill.

## OF BUBOES.

SOMETIMES, a bubo in the groin appears in a few days after a chancre on the penis, but seldom or ever if the progress of the chancre be promptly arrested, and the patient observes a prudent mercurial course. Most frequently, however, when a chancre has been suffered to increase by inefficient treatment, a bubo manifests itself in two or three weeks. A pain is, usually, at first, felt in the groin, and next a small hard tumor is perceived, which increases, daily, in size: as it grows larger, it affords a sensation of throbbing, and the skin over it becomes red: the patient now not only experiences pain, but difficulty in walking.

A venereal bubo, if neglected, almost uniformly suppurates, and in a few days bursts, forming a deep, ugly ulcer, with hard, rugged edges, and discharges a thin matter, often streaked with blood, and of a disagreeable smell.

When a venereal bubo first appears, the patient should every night rub well into the inside of both thighs, particularly, on the side where the bubo is situated, a quantity of strong mercurial ointment, equal, in bulk, to a nutmeg; continuing, at the same time, to use the pills which it is supposed he has been taking. If his general health permits, he should be bled.

If the tumor increases, and becomes painful, he will find it necessary to lie in bed. A cloth dipped in a strong, cold, solution of sugar of lead, ought to be kept constantly wet on the part. As the mercurial ointment, rubbed in the thighs, will keep up a proper action in the system, it will now be advisable for him, suspending the use of the pills, to take, as a purge, fifteen grains of calomel, and twenty-five grains of jalap; when this has operated he should have nourishing broths and the like, that the stomach may recover its tone. If, after the operation of the purge, the gums are considerably sore, the pills need not at this time be again taken.

If it be found impossible to prevent the bubo from suppurating, warm poultices should be applied, and when it is sufficiently ripe it is frequently advantageous to open it with a lancet, thereby preventing pain and a prolongation of the disease.

After it is opened it should be dressed with mild poultices so long as there is much appearance of inflammation, and, afterwards, with an ointment composed of hog's lard two parts, bees-wax and rosin each one part, washing it twice a day with a solution of Castile soap.

The jagged edges and proud flesh, if there be any, should, occasionally, be slightly touched with the caustic.

The mercurial ointment should be rubbed in the thighs for some days after the bubo is opened; unless the gums become very sore, and there is a considerable flow of spittle, when its use must be discontinued; and as much flour of sulphur, taken morning and night as can be heaped in a large tea spoon until the mercurial action is diminished.

If either a chancre or bubo presents a foul, livid, sloughy appearance, and has an unusually bad smell, the best application is a charcoal poultice. The charcoal should be powdered extremely fine, and then mixed up with a very thin mush made of the finest corn meal; so that at least more than half of the thickening matter is charcoal. The mush is to be only warm when the charcoal is mixed with it, and it is not to be heated afterwards, more than to make it comfortable to the patient; sometimes, a little yeast is added. This poultice ought to be soft, and changed three times in twenty-four hours. All mercurial medicines must be for a time laid aside, and the patient should live generously, using wine, brandy, or porter, to keep up the tone of the system, until the unpleasant symptoms are removed.

It should be noticed that a simple mode of treatment was insisted on for chancres; but where a chancre of considerable standing has been neglected, or ill treated, and has become inactive, something is required to stimulate it.

There is nothing better for this purpose, than to dissolve five grains of corrosive sublimate, and twelve

grains of muriate of ammonia in a half pint of water, and to wash the chancre with it twice or thrice a day, as may be needed, until it shews some permanent signs of inflammation, at the same time continuing the usual dressings.

In both the clap and the pox too much attention cannot be paid to cleanliness, not only about the diseased parts, but of the whole body. Soap and water should be used in washing sores, and dirty rags or cloths should be thrown away or boiled in ley.

The pox is to be cured, only, by some preparation of mercury, but it is impossible to tell the exact amount of any preparation that will cure it, or to fix the precise time necessary for the gums to remain affected, unless, as has been previously mentioned, where the chancre had been destroyed by caustic, and no other symptoms remained.

It has been our province to offer advice for contingencies that might occur. Thus, several injections have been prescribed for the clap, when in common cases, with prudence, one or two and the use of the balsam copaiva will answer. Also, when a chancre first appears, a single effectual application of the caustic, with a couple of weeks moderate affection of the gums, will almost uniformly ensure safety; neither need the patient's complaint be known to his acquaintances, and even, when, from circumstances beyond control, the patient has not been able to use proper means, or to avoid exposure, and a bubo appears, rules are laid down by which he may, in a short time, be cured; and a judicious continuance of the pills for a couple of weeks afterwards, will secure him from the danger of a constitutional affection.

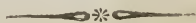
Whilst a patient is under the influence of mercury, he ought to wear a flannel shirt and drawers, and avoid sudden changes from heat to cold, and also wet. He may drink coffee, chocolate, tea, or any pleasant and mild domestic beverage or water, with a piece of toasted bread in it. A moderate quantity of pure water, which is not colder than river water in autumn, will not prove injurious.

The same rules and modes of treatment directed for



men, will answer, also, for females, with of course an allowance for the different structure of the body, and the use of a female instead of a male syringe, when injections are necessary.

If any excuse be necessary for having endeavoured, in this place, to point out the symptoms and mode of cure of these too common and opprobrious diseases, it will be found in the unhappy condition of many infants, nurses, midwives, and married women, whose husbands lead dissolute lives, and whose constitutions are often ruined by the danger not being known in due time, or by quackery afterwards.



## OF THE SCROFULA, OR KING'S EVIL.



THE scrofula chiefly affects the glands, especially those of the neck. Children, and young persons of a sedentary life are very subject to it. It is one of those diseases which may be palliated by proper regimen, but seldom yields to medicine. The inhabitants of cold, damp, marshy countries are most liable to the scrofula.

**CAUSES.**—This disease mostly proceeds from an hereditary taint. Children who have the misfortune to be born of sickly parents, whose constitutions have been greatly injured by chronic diseases, are apt to be affected with it. It may however, proceed from diseases that weaken the habit, as the small pox, measles, &c. External injuries, as blows, bruises, and the like, sometimes produce scrofulous ulcers; but we believe, when this happens, that there has been a predisposition to this dis-

ease. In short, whatever tends to weaken the system, as the want of proper exercise, too much heat or cold, confined air, unwholesome food, bad water, the long use of weak watery aliments, and the neglect of cleanliness, may probably excite the complaint in those predisposed to it. Nothing tends more to induce this disease in children, than allowing them to continue long wet.

**SYMPTOMS.**—At first, small knots appear under the chin or behind the ears, which gradually increase in number and size, till they form one large hard tumour. This often continues for a long time without breaking, and when it does break, it only discharges a thin watery humour. Other parts of the body are likewise liable to its attack, as the arm pits, groins, feet, hands, eyes, and breasts. Nor are the internal parts exempt from it. It often affects the lungs, liver, and spleen.

Those obstinate ulcers, which break out upon the feet and hands with swelling, and little or no redness, are of a scrofulous character. They seldom discharge good matter, and are exceedingly difficult to cure. The white swellings of the joints appear to be of this kind. They are with difficulty brought to a suppuration, and when opened, they only discharge a thin, acrid, watery substance.

Children of a scrofulous habit, may generally be distinguished by a complexion extremely delicate, of a lively red colour, mixed with a beautiful white; the lips, especially the upper one, are thick and protuberant; the pupils of the eyes are dilated, and the whites of them are of a beautiful pearly colour, the eyelids droop unnaturally, and give to the countenance a melancholy but interesting appearance; the head is large and protuberant behind, and the eyes are of a light grey or blue colour. These signs, taken collectively, sufficiently manifest the scrofulous constitution. Children are more liable to the complaint than adults.

**MODE OF TREATMENT.**—Among the numerous remedies proposed at different times for the cure of this complaint, there is none, says Dr. Thomas, so efficacious

as living by the sea side, with daily bathing, and drinking a sufficiency of the salt water to keep the bowels gently open. The use of the sea water will, however answer best before the tumours have run on to suppuration. After hectic symptoms have been induced, it would be improper.

When from any circumstance, the sea-bathing cannot be resorted to, the patient may use fresh water, in which a quantity of salt has been dissolved; and stools throughout the disease should be daily procured by the administration of some laxative medicine, as magnesia or rhubarb.

Next to cold bathing and drinking the salt water, we recommend the bark or the preparations of iron. The cold bath may be used in summer, and the bark in winter. To an adult, a dram of the bark in powder may be given in a glass of port wine four or five times a day. Children, and such as cannot take it in substance, may use the decoction made in the following manner.

Boil an ounce of Peruvian bark in a quart of water down to a pint: towards the end, half an ounce of sliced liquorice root, and a handful of raisins may be added, which will render the decoction less disagreeable. The liquor must be strained, and two, three, or four table spoonsful, according to the age of the patient, given three times a day.

Cicuta or hemlock may sometimes be administered with advantage in scrofula. The extract of this plant is the preparation to be used; it may be taken in doses of one or two grains two or three times a day, The dose must be increased gradually, until we have evidence of its action on the system, by a giddiness of the head, and nausea being present.

External applications are of little use, and indeed they sometimes tend to displace the disease from the safe position it has assumed, and to drive it to more vital parts. Before the tumour breaks, nothing ought to be applied to it, but a piece of flannel, or something to keep it warm. After it breaks, some stimulating ointment, as the yellow basilicon, mixed with about one sixth or eighth part of its weight of the red precipitate of mercury, may be applied. The sore may be dressed

with this twice a day; if it be fungous or spongy, and does not heal well, a larger proportion of the precipitate may be added.

Medicines which mitigate this disease, though they do not cure it, are not to be despised. If the patient can be kept alive by any means until he arrives at the age of puberty, he has a great chance to get well; but if he does not recover at this time, in all probability he never will.

As this disease proceeds, in a great measure from relaxation, the diet ought to be generous and nourishing, but at the same time, light and easy of digestion; such as well fermented bread, made of sound grain, the flesh and broth of young animals, with an occasional glass of wine or good ale. The air ought to be open, dry, and not too cold, and the patient should take as much exercise as he can bear. This is of the utmost importance. Children who have sufficient exercise, are seldom troubled with the scrofula.

A diet drink, prescribed with very great advantage by Dr. Parrish of Philadelphia, in cases of scrofula, consists of a decoction of peppiseva or ground holly, the sarsaparilla and the sassafras. To render it more agreeable, it may be brewed into a pleasant beer, by the addition of molasses and a little of the essence of spruce.



## OF THE ASTHMA.



THIS is a disease of the lungs, which seldom admits of a cure. Persons in the decline of life are most liable to it. It is distinguished into the moist and dry, or humoral and nervous. The former is attended with expect-



toration or spitting; but in the latter the patient seldom expectorates; sometimes, however, a little tough phlegm is thrown up by a severe fit of coughing.

**CAUSES.**—The asthma is sometimes hereditary. It may likewise proceed from the bad formation of the breast; the fumes of metals or minerals taken into the lungs; violent exercise, especially running; the obstruction of customary evacuations, as the menses or the hæmorrhoidal discharges; the sudden retrocession of the gout, or striking in of eruptions, as the small pox or measles; violent passions of the mind, as sudden fear or surprise: in a word, the disease may proceed from any cause that either impedes the circulation of the blood through the lungs, or prevents their being duly expanded by the air.

**SYMPTOMS.**—Asthma may be known by a quick laborious respiration, which is generally performed by a kind of wheezing noise. Sometimes the difficulty of breathing is so great, that the patient is obliged to keep in an erect posture, otherwise he is in danger of being suffocated. A fit or paroxysm of the asthma generally happens after a person has been exposed to cold easterly winds, has been abroad in thick foggy weather, has got wet, continued long in a damp place under ground, or has taken some food which the stomach could not digest.

The paroxysm is generally ushered in with listlessness, want of sleep, hoarseness, a cough, belching of wind, a sense of heaviness about the breast, and difficulty of breathing. To these succeed heat, fever, pain of the head, sickness and nausea, great oppression of the breast, palpitation of the heart, a weak and sometimes intermitting pulse, an involuntary flow of tears, and bilious vomitings. All the symptoms grow worse towards night; the patient is easier sitting up, than when reclining in bed, and is very desirous of cool air.

**MODE OF TREATMENT.**—Almost all that can be done by medicine in this disease, is to relieve the patient

when seized with a violent fit. This, indeed, requires great expedition, as the disease, at times, proves suddenly fatal. During the paroxysm, the bowels are generally costive; a purging clyster, with a solution of asa-fœtida, ought therefore to be administered, and if there is a necessity, it may be repeated two or three times. The patient's feet and legs ought to be immersed in warm water, and afterwards rubbed with a dry cloth. Bleeding, unless extreme weakness or old age should forbid it, is very proper.

If there be a violent spasm about the breast or stomach, warm fomentations, bladders filled with warm water, or blisters, may be applied to the part affected, and warm cataplasms to the soles of the feet. Sometimes a vomit has a very good effect, and snatches the patient from the jaws of death. This, however, will be more safe after other evacuations have been premised.

In moist asthma, such things as promote expectoration or spitting ought to be used, as the syrup of squills and a solution of gum ammoniac. A common spoonful of the syrup, or oxymel of squills mixed with an equal quantity of cinnamon water, may be taken three or four times a day, and four or five pills, made of equal parts of asa-fœtida and gum ammoniac, at bed time.

After copious evacuations, large doses of ether have been found very efficacious in removing a fit of the asthma. The following mixture will likewise produce very happy effects: to four or five ounces of the solution of gum ammoniac, add two ounces of cinnamon water, the same quantity of simple syrup, and half an ounce of the paregoric elixir. Of this, two table spoonsful may be taken every three hours.

In the dry or nervous asthma, a cup of very strong coffee, given without cream or sugar, and repeated, if necessary, every fifteen or twenty minutes, has been known to remove the fit entirely.

Where the expectoration is scanty or difficult, a free discharge should, if possible, be excited by the pectoral medicines, such as the squills and gum ammoniac, prepared as above mentioned, small doses of tartar emetic, assisted by inhaling the steam arising from warm wa-

ter and vinegar, bathing the feet occasionally in warm water, or making use of a warm bath will also tend to produce the same effect.

When the paroxysm has subsided, the next object should be to prevent a recurrence of the distressing symptoms; and to effect this, the patient must carefully guard against all the exciting causes. If the disease is dependent on some other complaint, that must first be attended to. If on retrocedent gout, blisters should be applied to the legs, sinapisms to the feet, and such other means pursued as are calculated to draw the gouty affection to the extremities. If it depends on repelled eruptions, measures calculated to restore these, should be resorted to.

Emetics, from their power of assisting expectoration, and of determining the blood from the lungs to the surface of the body, have been found serviceable in the various forms of asthma. It will be proper, therefore, occasionally to administer a gentle emetic, such as ipecacuanha, during the intervals between the paroxysms; at the same time giving the pectoral mixtures before recommended. The Peruvian bark, the stomachic bitters, the preparations of iron, or the chalybeate waters, may also be administered. Cold bathing and horseback exercise, when the weather permits, will likewise prove serviceable in imparting tone to the constitution.

The flatulency, with which patients labouring under this disease are often afflicted, may sometimes be relieved by a dose of magnesia given in peppermint water. The bowels also, should be kept open by the occasional administration of some gentle laxative, as rhubarb, &c.

The food ought to be light and of easy digestion. Boiled meats are to be preferred to roasted; windy food, and whatever is apt to swell in the stomach, should be avoided. Light puddings, broths, and ripe fruits, baked, boiled, or roasted, are proper. Strong liquors of all kinds, especially malt liquor, are hurtful. The patient should never eat immediately before retiring to rest. His clothing should be warm, especially in the winter season. As all disorders of the breast are much relieved by promoting the perspiration and keeping the feet warm, a flan-

nel shirt or waistcoat, and thick shoes, will be of essential service.

But nothing is of so great importance in the asthma, as pure moderately warm air. Asthmatic people can seldom bear either the close heavy air of a large town, or the sharp, keen atmosphere of a bleak hilly country; a medium therefore between these is to be chosen. The air near a large town is often better than at a distance, provided the patient be removed so far as not to be affected by the dense atmosphere observable in crowded cities. Some asthmatic patients breathe easier in town than in the country; but this is seldom the case, especially in places where much coal is burnt. Those who can afford it, ought to travel into a warmer climate.

Exercise is of very great importance in the asthma, as it promotes the digestion, and the proper preparation of blood. The blood of persons afflicted with this complaint, is seldom duly prepared, owing to the proper action of the lungs being impeded. For this reason, such people ought daily to take as much exercise, either on foot, horseback, or in a carriage, as they can bear.



## OF THE APOPLEXY.



AN apoplexy is a sudden privation of all the senses and motions of the body, except those of the heart and lungs, attended by stupefaction, and sometimes snoring.

This disease often proves fatal; yet it may sometimes be removed by proper care. It chiefly attacks sedentary persons, of a gross habit, who use a rich and plentiful diet, and indulge in strong liquors. People in the decline of life are most subject to the apoplexy.



**CAUSES.**—The immediate cause of an apoplexy, is a compression of the brain, occasioned by an excess of blood, or a collection of watery fluid in that organ. The former is called a sanguineous, and the latter a serous apoplexy. It may be occasioned by any thing that increases the circulation towards the brain, or prevents the return of the blood from the head; as intense study, violent passions, viewing objects for a long time obliquely, wearing any thing too tight about the neck, a rich and luxurious diet, suppression of urine, suffering the body to cool suddenly after having been greatly heated, continuing long in a warm or a cold bath, the inordinate use of spices, or high seasoned food, excess of venery, the sudden striking in of any eruption. suffering issues or setons suddenly to dry up, the stoppage of any customary evacuation, a mercurial salivation pushed too far, or suddenly checked by cold, wounds or bruises on the head, or long exposure to excessive cold. A large head, with a short neck, frequently predisposes to the complaint.

**SYMPTOMS.**—The usual forerunners of an apoplexy are giddiness, and pain of the head, loss of memory, drowsiness, noise in the ears, night-mare, and laborious respiration. When persons of an apoplectic form observe these symptoms, they have reason to fear the approach of a fit, and should endeavour to prevent it by bleeding, a slender diet, and opening medicines.

In the sanguine apoplexy, if the patient does not die suddenly, the countenance appears florid, the face is swelled or puffed up, and the blood vessels, especially about the neck and temples, are turgid; the pulse beats slow and full, the eyes are prominent and fixed, and the breathing is difficult, and performed with a rattling noise in the throat and snoring. The excrements and urine are often voided, and the patient is sometimes seized with vomiting.

**MODE OF TREATMENT.**—In this species of apoplexy, every method must be taken to lessen the force of the circulation towards the head. The patient should be kept perfectly quiet and cool. His head should be raised,

and his feet suffered to hang down. His clothes ought to be loosened, especially about the neck, and fresh air admitted into his chamber. His garters should be tied pretty tight, by which means the motion of the blood from the lower extremities will be in some degree retarded. As soon as he is placed in a proper posture, he should be bled freely in the neck or arm, and, if necessary, the operation may be repeated in two or three hours; blisters should also be applied between the shoulders and to the calves of the legs, and mustard plasters to the soles of the feet.

A clyster consisting of three ounces of Epsom salts, dissolved in a pint of warm water, with an ounce of antimonial wine, and a suitable quantity of oil, will have a powerful effect in relieving the head; this should be repeated as often as the case demands. In full vigorous habits, thirty or forty ounces of blood are required to produce a good effect. Dr. Physick has taken ninety ounces with decided benefit.

Should the patient, notwithstanding this treatment, still remain in an apoplectic state, cups, or leeches, if they can be procured, should be applied to the temples, and after they are removed, the bleeding encouraged by applications to the part of cloths wrung out of warm water.

As soon as the patient becomes capable of swallowing, an active cathartic should be administered; this may consist of calomel combined with jalap, or with any of its ordinary adjuncts—to be worked off the following morning with Epsom salts or senna tea. Emetics have also been proposed, but these are admissible only where the apoplexy has been produced by intoxication, by overloading the stomach with food, or where opium or other narcotic poisons have been swallowed. Where vomiting takes place spontaneously, the stomach may be relieved by drinking plentifully of warm chamomile tea.

In the serous apoplexy, the symptoms are nearly the same, only the pulse is not so strong, the countenance is less florid, and the breathing less difficult. Bleeding is not so necessary here as in the former case. It may generally be performed once with safety and advantage.

but should not be repeated. The patient should be placed in the same posture as directed above, and should have blisters or sinapisms applied. Laxative clysters should in like manner be administered, and the bowels kept constantly open by repeated doses of some gentle purgative medicine.

When, in apoplexy, symptoms of debility succeed those of high excitement, some practitioners administer copiously the diffusible stimulants, as camphor, volatile alkali, wine-whey, &c. When the disease arises from any disorder of the stomach, this plan is correct, but when it is caused by any power acting immediately upon the brain, the practice is inadmissible.

When all other means fail of overcoming the disease, salivation should be resorted to; and to effect this as speedily as possible, calomel should be given in pills of one grain each, several times a day, and the mercurial ointment freely applied, by friction, to the groins of the patient.

The *coup de soleil*, or stroke of the sun, which now and then, during the summer, in our warmer latitudes, affects persons exposed to the meridian sun, appears to be similar, in most respects, to an attack of apoplexy, and requires the same treatment.

Persons of an apoplectic make, or those who have been attacked by an apoplexy, ought to use a very spare and slender diet, avoiding all strong liquors, spices, and high seasoned food. They ought likewise to guard against all violent passions, and to avoid the extremes of heat and cold. The head should be daily washed with cold water. The feet ought to be kept warm, and never suffered to continue long wet. The body must be kept open either by food or medicine, and a little blood may be drawn every spring and fall. Exercise should by no means be neglected; but it ought to be taken in moderation. Nothing has a more happy effect in preventing an apoplexy than perpetual issues or setons; great care, however, must be taken not to suffer them to dry up, without opening other drains in their place. Apoplectic persons ought never to go to rest with a full stomach, or lie with their heads low, or wear any thing too tight about their necks.

## OF COSTIVENESS.



WE do not here mean to treat of those constrictions of the bowels, which are symptoms of other complaints, but only to take notice of that infrequency of stools which sometimes happens, and which in some particular constitutions may occasion diseases.

Costiveness may proceed from drinking too freely of claret and port wine or other astringent liquors; too much exercise, especially on horseback, or from a long use of cold insipid food, which does not sufficiently stimulate the intestines. Sometimes it is owing to the bile not entering the intestines, as in the jaundice; and at other times it proceeds from spasms or torpor of the intestines themselves.

Excessive costiveness often occasions pains of the head, vomiting, colics, and other complaints of the bowels. Some people can bear costiveness to a great degree without suffering any inconvenience from it. We have heard of persons, enjoying pretty good health, who do not go to stool once a week, and others not above once a fortnight; and again, of seamen performing long European voyages without a single passage from the bowels. These are, however, only exceptions to the general rule, that persons by neglecting to procure daily evacuations, render themselves liable to the most distressing and dangerous diseases.

Persons who are generally costive, should live upon a moistening and laxative diet, as roasted or boiled apples, pears, stewed prunes, raisins, gruels with currants, butter, honey, sugar, and such like. Broths are likewise proper.



Rye bread, or that which is made of a mixture of wheat and rye ought to be eaten. No person troubled with costiveness should eat white bread alone, especially that which is made of fine flour.

Costiveness is increased by keeping the body too warm, and by every thing that promotes the perspiration, as wearing flannel, or lying too long in bed. Intense thought and a sedentary life are likewise hurtful. All the secretions and excretions are promoted by moderate exercise without doors, and by a gay, cheerful, sprightly temper of mind.

The drink should be of an opening quality. Ardent spirits and astringent wines, as port and claret, ought to be avoided. Malt liquor of a moderate strength, is very proper. Buttermilk and whey are likewise serviceable, and may be drank as inclination directs.

Persons troubled with costiveness, ought, if possible, to remedy it by diet, as the constant use of medicines for that purpose is attended with many inconveniences, and often with injurious consequences. Dr. Buchan says, he never knew any one get into the habit of taking medicine for keeping the body open, who could leave it off. In time the custom becomes necessary, and often ends in a total relaxation of the bowels, indigestion, loss of appetite, wasting of the strength, and death.

When the body cannot be kept open without medicine, we recommend gentle doses of castor oil, or sulphur and cream of tartar, to be taken twice or three times a week. These mild medicines are not so injurious to the stomach as aloes, jalap, or the other drastic purges too much in use. Infusions of senna and manna may likewise occasionally be taken, or half an ounce of soluble tartar dissolved in water gruel.

## WANT OF APPETITE.



THIS may proceed from a foul stomach; indigestion; the want of free air and exercise; grief; fear; anxiety; or any of the depressing passions; excessive heat; the use of strong broths, fat meats, or any thing that palls the appetite, or is hard of digestion; the immoderate use of strong liquors, tea, tobacco, opium, &c.

The patient ought, if possible, to make choice of an open dry air; to take exercise daily on horseback, or in a carriage; to rise betimes; and to avoid all intense thought. He should use a diet of easy digestion; and avoid excessive heat and fatigue.

If want of appetite proceeds from errors in diet, or any other part of the patient's regimen, it ought to be changed. If nausea and retchings shew that the stomach is improperly loaded, a vomit will be of service. After this, a gentle purge or two of epsom or glauber salts, may be taken. The patient ought next to use some of the stomachic bitters infused in wine. Though gentle evacuations are necessary, yet strong purges and vomits are to be avoided, as they weaken the stomach, and impair the digestion.

Elixir of vitriol has been found beneficial in most cases of indigestion, weakness of the stomach, or want of appetite. From twenty to thirty drops of it may be taken two or three times a-day in a glass of wine and water. It may likewise be mixed with the tincture of bark, one dram of the former to an ounce of the latter, and two tea-spoonsful of it taken in wine or water.

The chalybeate waters, if drank in moderation, are

generally of considerable service in want of appetite. The salt water has likewise a good effect, but must not be used too freely. All who are afflicted with indigestion and deficiency of appetite, should, if possible, repair to places of public resort where springs are to be found. The waters, with change of air, and cheerful company, will often prove very essentially beneficial.



## THE HEART-BURN.



THE heart-burn consists of an uneasy sensation of heat about the pit of the stomach, which is sometimes attended with anxiety, nausea, and vomiting.

It may proceed from indigestion, bile, debility of, or the abounding of an acid in the stomach. Persons liable to this complaint, ought to avoid stale liquors, acids, windy or greasy aliments, and should never use violent exercise soon after a plentiful meal.

When the heart-burn proceeds from debility of the stomach, or indigestion, the patient ought to take a dose or two of rhubarb, and afterwards to use infusions of the bark, or any other of the stomachic bitters, infused in wine, good whiskey, or brandy. Exercise in the open air, and every thing that promotes digestion, will be found serviceable.

When bilious accumulations occasion the heart-burn, a tea-spoonful of the sweet spirits of nitre in a glass of water, or cup of tea, will generally give relief.

If acidity or sourness of the stomach occasions the heart-burn, absorbents are the proper medicines. In this case, an ounce of powdered chalk, half an ounce of fine

sugar, and a quarter of an ounce of gum-arabic, may be mixed in a quart of water, and a tea-cupful of it taken as often as is necessary. But the safest and best absorbent is the calcined magnesia. This not only acts as an absorbent, but likewise as a purgative; whereas chalk and other absorbents of that kind, are apt to lie in the intestines and occasion obstructions. Magnesia is not very disagreeable, and may be taken in a cup of milk, or in a glass of mint-water. A large spoonful is the usual dose, but it may be taken in a much greater quantity when occasion requires.

If flatulence or wind causes this complaint, the most proper medicines are carminatives; as anise-seed, juniper-berries, ginger, and canella alba. These may either be chewed, or infusions of them in wine, brandy, or other spirits may be taken. One of the safest medicines of this kind, is the tincture made by infusing an ounce of rhubarb, and a quarter of an ounce of the cardamon seed, in a pint of brandy or whiskey. After this has digested for two or three days, it ought to be strained, and four ounces of white sugar added to it: it must then stand a second time until the sugar is dissolved. A table-spoonful of it may occasionally be taken for a dose.

Dr. Buchan says, he has frequently known the heart-burn, particularly in pregnant women, cured by chewing green tea.



## OF NERVOUS COMPLAINTS.



OF all diseases incident to mankind, those of the nervous character are the most complicated and difficult to cure. A volume would not be sufficient to point out their various appearances. They imitate almost every disease; and are seldom alike in two different persons, or even the same person at different times. They are continually changing shape; and upon every fresh attack, the patient thinks he feels symptoms which he never experienced before. Nor do they only affect the body; the mind likewise suffers, and is thereby rendered weak and peevish. The low spirits, timorousness, and melancholy, which generally attend nervous disorders, induce many to believe that they are entirely diseases of the mind; but this change of temper is rather a consequence, than the cause of nervous diseases.

**CAUSES.**—Every thing that tends to relax or weaken the body, disposes it to nervous diseases, as indolence, excessive venery, drinking too much tea or other weak liquors warm, frequent bleeding, purging, or vomiting. Whatever hurts the digestion, or prevents a proper assimilation of the food, has likewise this effect; as long fasting, excess in eating or drinking, the use of windy, crude, or unwholesome aliments, and an unfavorable posture of the body.

Nervous disorders often proceed from intense application to study. Indeed few studious persons are entirely free from them. Nor is this at all to be wondered at; intense thinking not only preys upon the spirits, but pre-

vents the person from taking proper exercise, by which means the digestion is impaired, and nourishment prevented. Grief and disappointment likewise produce the same effects. "I have known," says Dr. Buchan, "more nervous patients who dated the commencement of their disorders from the loss of a husband, a wife, a favorite child, or from some disappointment in life, than from any other cause."

**SYMPTOMS.**—We shall mention only some general symptoms of these complaints, as to enter into a particular enumeration would be an useless and an endless task. Windy distentions of the stomach and intestines, are common; the appetite and digestion are usually bad; sometimes there is an uncommon craving for food, which frequently turns sour on the stomach, and the patient is troubled with a vomiting of clear water or tough phlegm; pains are felt about the region of the navel, attended with a rumbling noise in the bowels; the body is sometimes loose, but more commonly bound, which occasions a retention of wind and great uneasiness.

The urine is sometimes in small quantity, at other times very copious and quite clear. There is a great straitness of the breast, with difficulty of breathing; violent palpitations of the heart, and sudden flushings of heat in various parts of the body are also present; at other times the patient experiences a sense of cold; flying pains in the arms and limbs; pains in the back and belly, resembling those occasioned by the gravel. The pulse is very variable, sometimes uncommonly slow, and at other times very quick: yawning, hickupping, frequent sighing, and a sense of suffocation, as if from a ball or lump in the throat, and alternate fits of crying and convulsive laughing, affect the patient; the sleep is unsound, seldom refreshing, and often attended with the night-mare.

As the disease increases, the patient is molested with head-aches, cramps, and fixed pains in various parts of the body; the eyes are clouded, and often affected with pain and dryness; there is a noise in the ears, and often a dulness of hearing; in short, the whole of the animal

functions are impaired. The mind is disturbed on very trivial occasions, and hurried into the most perverse commotions, such as inquietude, terror, sadness, anger, and the like. The patient is apt to entertain wild imaginations and extravagant fancies; the memory becomes weak and the judgment fails.

Nothing is more characteristic of this disease than a constant dread of death. This renders those unhappy persons who labor under it, peevish, fickle and impatient. They are likewise apt to imagine that they labor under diseases from which they are quite free; and are very angry if any one attempts to set them right, or laugh them out of their ridiculous notions.

**MODE OF CURE.**—Persons afflicted with nervous diseases, ought never to fast long. Their food should be solid and nourishing, but of easy digestion. Fat meats and heavy sauces are hurtful. All excess should be carefully avoided. They ought never to eat more at a time than they can easily digest. Heavy suppers are to be avoided.

Exercise in nervous disorders is superior to all medicines. Riding on horseback is generally esteemed the best, as it gives motion to the whole body without fatiguing it. I have known some patients, however, with whom walking agreed better, and others who were most benefitted by riding in a carriage. Every one ought to use that which he finds most beneficial. Long sea voyages have an excellent effect; and to those who have sufficient resolution, we would by all means recommend this course. Even change of place, and the sight of new objects, by diverting the mind, have a great tendency to remove these complaints. For this reason a long journey, or a voyage, is of much more advantage than riding short journies near home.

A cool and dry air is proper, as it braces and invigorates the whole body. Few things tends more to relax and enervate than hot air, especially that which is rendered so by great fires, or stoves in small apartments. But when the stomach or bowels are weak, the body ought to be well guarded against cold, especially in win-

ter, by wearing a thin flannel shirt and drawers next the skin. This will keep up an equal perspiration, and defend the alimentary canal from many impressions to which it would otherwise be subject, upon every sudden change from warm to cold weather. Rubbing the body frequently with a flesh-brush, or a coarse linen cloth, is likewise beneficial, as it promotes the circulation, perspiration, &c. Persons who have weak nerves ought to rise early, and take exercise before breakfast, as lying in bed is debilitating. They ought likewise to be diverted, and to be kept as easy and cheerful as possible.—There is nothing which hurts the nervous system, or weakens the digestive powers more than fear, grief, or anxiety.

Though nervous diseases are seldom radically cured, yet the symptoms may sometimes be alleviated, and the patient's life rendered at least more comfortable by proper medicines.

When the patient is costive, he ought to take a little rhubarb, calcined magnesia, or some other mild purgative, and should never suffer his body to be long bound. All strong and violent purgatives are however to be avoided. I have generally seen an infusion of senna and rhubarb in brandy, answer very well. This may be made of any strength, and taken in such quantity as the patient finds necessary. When digestion is bad or the stomach relaxed and weak, the following infusion of Peruvian bark and other bitters may be used with advantage:

Take of Peruvian bark an ounce, gentian-root and orange-peel, of each half an ounce; let these ingredients be all bruised in a mortar, and infused in a bottle of brandy, for the space of five or six days. A table-spoonful of the strained liquor may be taken in half a glass of water, an hour before breakfast, dinner and supper.

Few things tend more to strengthen the nervous system than cold bathing. This practice, if duly persisted in, will produce very extraordinary effects; but when the liver or other *viscera* are obstructed, or otherwise unsound, the cold bath is improper. It is therefore to be used with caution. The most proper seasons for it are



summer and autumn. It will be sufficient, especially for persons of a spare habit, to go into the cold bath three or four times a week. If the patient be weakened by it, or feels chilly for a long time after coming out, it will not prove beneficial.

In patients afflicted with wind, great benefit is often derived from the elixir of vitriol. It may be taken in the quantity of fifteen, twenty or thirty drops, twice or thrice a day, in a glass of water. This expels wind, strengthens the stomach, and promotes digestion.

Opiates are generally extolled in these maladies; but as they only palliate the symptoms and generally afterwards increase the disease, we would advise people to be extremely sparing in the use of them, lest habit render them at last absolutely necessary.

It would be an easy matter to enumerate many medicines which have had great reputation for relieving nervous disorders; but whoever wishes for a thorough cure, must expect it from regimen alone; we shall therefore omit mentioning more medicines, and again recommend the strictest attention to DIET, AIR, EXERCISE, and AMUSEMENTS.

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## OF HYSTERIC AFFECTIONS.

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THESE belong to the tribe of nervous diseases. Hysteric affections are generally considered peculiar to females, and are supposed to depend on some influence which is owing to the peculiarity of sex; but we frequently see, especially among the delicate and valetudinary of the male sex, forms of disease strongly mark-

ed with hysterical symptoms. Women, however, of a delicate habit, whose stomach and intestines are in a relaxed state, and whose nervous system is extremely irritable, are most subject to the hysterical affections. A sudden suppression of the *menses* often gives rise to hysteric fits. They may likewise be excited by irritations of the nerves, of the intestines, by wind, and also by violent passions and affections of the mind, such as fear, grief, anger, or disappointment.

Sometimes the hysteric fit resembles a swoon or fainting fit, during which the patient lies as in a sleep, only the breathing is so low as scarcely to be perceived. At other times the patient is affected with strong convulsions. The symptoms which precede hysteric fits are likewise various in different persons. Sometimes the fits come on with coldness of the extremities, yawning and stretching, lowness of spirits, oppression and anxiety. At other times the approach of the fit is foretold by a feeling, as if there were a ball at the lower part of the belly, which gradually rises towards the stomach, where it occasions inflation, sickness, and sometimes vomiting; afterwards it rises into the gullet, and occasions a degree of suffocation, to which quick breathing, palpitation of the heart, giddiness of the head, dimness of sight, loss of hearing, with convulsive motions of the extremities and other parts of the body, succeed.—The hysteric paroxysm is often introduced by an immoderate fit of laughter, and sometimes it goes off by crying. Indeed there is not much difference between the laughing and crying of a highly hysterical person.

Our aim in the treatment of this disease, must be to shorten the fit or paroxysm when present, and to prevent its return. The longer the fits continue, and the more frequently they return, the disease becomes more obstinate. Their strength is increased by habit, and they induce so great a debility of the system, that it is with difficulty removed.

It is too common during the hysteric fit or paroxysm, to bleed the patient. In strong persons of a plethoric habit, and where the pulse is full, this may be proper; but in weak and delicate constitutions, or where the dis-

ease has been of long standing, or arises from inanition, it is not safe. The best course in such a case is to rouse the patient by strong smells, as burnt feathers, asafœtida, or spirits of hartshorn, held to the nose. Hot bricks may also be applied to the soles of the feet, and the legs, arms and belly, may be strongly rubbed with a warm cloth. Putting the feet and legs into warm water, is peculiarly proper when the fits precede the flow of the *menses*. In case of costiveness, a laxative clyster with asafœtida will be proper; and as soon as the patient can swallow, two table-spoonsful of a solution of asafœtida, or of some cordial, may be given.

The radical cure of this disorder will be best attempted at a time when the patient is most free from fits. It will be greatly promoted by a proper attention to diet.

Cold bathing, and every thing that braces the nerves and invigorates the system, is beneficial; but lying too long in bed, or whatever relaxes the body, is injurious. It is of the greatest importance to keep the mind constantly easy and cheerful, and, if possible, to have it always engaged in some agreeable and interesting pursuit.

The proper medicines are those which strengthen the alimentary canal and the nervous system, such as preparations of iron, the Peruvian bark, and other bitters.—Twenty drops of the elixir of vitriol, in a cup of an infusion of the bark, may be taken three times a day. The bark and iron may likewise be taken in substance, provided the stomach can bear them; but they are generally given in too small doses to have any effect. Chalybeate waters frequently prove beneficial in this disorder.

If the lungs are loaded with phlegm, vomits will be of use; but they should not be too strong, nor frequently repeated, as they tend to debilitate the stomach. If there is a tendency to costiveness, it must be removed either by diet, or by taking a little opening medicine, as it shall be found necessary.

To lessen the irritability of the system, antispasmodics will be of use. The best antispasmodic medicines are musk, opium, and castor. When opium disagrees with the stomach, it may be given in clysters. It is

often successful in removing those periodical head-aches to which hysteric and hypochondriac patients are subject. Castor has in some cases been found to procure sleep where opium failed; for which reason, Dr. Whytt advises, that they should be joined together.

Hysterical women are often afflicted with cramps, in various parts of the body, which are most apt to seize them in bed or when asleep. The most efficient medicines in this case, are opium, blistering-plasters, and warm bathing or fomentations. When the cramp or spasm is very violent, opium is the remedy most to be depended on. In milder cases, immersing the feet and legs in warm water, or applying a blistering-plaster to the part affected, will often be sufficient to remove the complaint. In patients whose nerves are uncommonly delicate and sensible, it will be better to omit the blistering-plaster, and to attempt the cure by opiates, musk, camphire, and the warm bath.

Cramps are often prevented or cured by compression. Thus cramps in the legs are prevented, and sometimes removed, by tight bandages; and when convulsions arise from a flatulent distention of the intestines, or from spasms beginning in them, they may be often lessened or cured by making a pretty strong compression upon the *abdomen* by means of a broad belt. The Peruvian bark, it is asserted, has sometimes cured periodical convulsions after other medicines had failed.



**OF HYPOCHONDRIACAL AFFECTIONS.**

THESE also are considered as belonging to the class of nervous disorders, and there is no doubt but that in many instances their origin may be traced to similar sources; but what we deem by no means uncommon causes of hypochondriacal complaints, have been very much overlooked,—to wit: the repulsion of some cutaneous affection, which becomes seated in another form in some of the viscera; or a primary obstruction and disease in the liver, spleen, or some other glands.

Hypochondriasis is often connected with or dependent on dyspepsia or indigestion. When the disease can be traced by nice observation to any of these sources, it must be evident to every reasonable person that the cause will have to be removed before the effect can cease. Indeed we have often felt pain on noticing individuals, evidently labouring under organic disease, laughed at by their unthinking acquaintance, for having the hypos, as they termed it, and for complaining, when nothing ailed them but whimsies of the brain.

Men of a melancholy temperament, whose minds are capable of great attention, and whose passions are not easily moved, are, in the decline of life, most liable to this disease. It is often brought on by long and serious attention to abstruse subjects, grief, excessive indulgence in venereal gratifications, and the like. It has been stated that where this disease depends on, or is connected with some local affection, that should be first attacked, as directed under the appropriate head in this work; where the origin is decidedly nervous, attention

to diet, air and exercise, with a proper use of tonics and antispasmodics, will be found most useful.

Cheerfulness and serenity of mind are by all means to be cultivated. Exercise of every kind is useful. The cold bath is likewise beneficial; and where it does not agree with the patient, frictions with the flesh-brush or a coarse cloth may be tried. If the patient has it in his power, he ought to travel either by sea or land. A voyage or a long journey, especially towards a warmer climate, will be of more service than any medicine.

The general intentions of cure in this disease, are to strengthen the alimentary canal, and to promote the secretions. These intentions will be best answered by the different preparations of iron and the Peruvian bark, which, after moderate evacuations, may be taken in the same manner as directed in the preceding disease.

If the patient is costive, it will be necessary to make use of some gentle opening medicines, as moderate sized pills composed of equal parts of aloes, rhubarb, and asafœtida, with a sufficiency of mucilage. Two, three or four of these may be taken as often as it shall be found needful, in order to keep the body gently open. Such as cannot bear the asafœtida, may substitute Spanish soap in its place.

Though a cheerful glass may have good effects in this disease, yet all manner of excess is hurtful. Intense study, and every thing that depresses the spirits, is likewise pernicious.

In persons afflicted with nervous disorders, there is great delicacy and sensibility of the whole nervous system, and an uncommon degree of weakness in the organs of digestion. These may be either natural or acquired. When owing to a defect in the constitution, they are hardly to be removed; but may be mitigated by proper care. When induced by diseases, as long or repeated fevers, profuse hæmorrhages, or the like, they prove also very obstinate, and will yield only to a course of regimen calculated to restore and invigorate the habit.

It has been already observed, that grief indulged, destroys the appetite and digestion, depresses the spirits, and induces an universal relaxation and debility of the

whole system. Instances of this are daily to be seen.—The loss of a near relation, or any other misfortune in life, is often sufficient to occasion the most complicated series of nervous symptoms.

The effects of intense study are pretty similar to those occasioned by grief. It preys upon the spirits, and destroys the appetite and digestion. To prevent these effects, studious persons ought, in the words of Dr. Armstrong, *to toy with their books*. They should never study too long at a time; nor attend long to one particular subject, especially if it be of a serious nature. They ought likewise to be attentive to their posture, and should take care frequently to unbend their minds by going into agreeable company.

With regard to diet, we will only observe, that nervous diseases may be induced either by excess or too great abstinence. Both of these extremes hurt the digestion. When the digestive organs are oppressed with fresh loads of food, before they have time to digest and assimilate the former meal, their powers are weakened. On the other hand, when the food is not sufficiently nourishing, or is taken too seldom, the bowels are inflated with wind, and direct debility ensues. These extremes are therefore with equal care to be avoided. They both tend to induce a morbid state of the nervous system, with all its dreadful train of consequences.

A common cause of nervous disorders, is *indolence*; the active and laborious are seldom troubled with it: they are mostly reserved for the children of ease and affluence, who generally feel their keenest force. All we shall say to such persons, is, that the means of prevention and cure are both in their power.

## OF DYSPEPSIA, OR INDIGESTION.



THE stomach, in the language of anatomists, is the most important organ of the body. In the inferior order of animals, among those which appear to partake almost the nature of vegetables, and are not possessed of the power of locomotion, such as the polypus and others, there are several which have no brain, but there is no animal existing that has not a stomach. Some among the ancients, aware of the vast importance of this living laboratory, pretended to believe, and they spake allegorically, that the seat of the soul was immediately above its upper orifice. The stomach is the organ of digestion; it is in succeeding portions of the alimentary canal, that we find the lacteals which commence the process of assimilation. Dyspepsia or indigestion\* is then, to use the language of the celebrated Dr. Wilson Philips, "an affection of the central part of a most complicated structure, capable of influencing its remotest parts, and each, through many channels and in various ways."

**CAUSES.**—Indigestion may be owing to a great variety of causes; the stomach, as we have stated, being so necessary for the support of life, and so intimately connected in its operations with all the vital functions, often sympathises with other parts which are in a diseased state.

A fracture of the skull, which oppresses a portion

\* We are aware that the terms dyspepsia and indigestion, have not been used by medical writers, as synonymes, but we feel no hesitation in using them here to express the same condition of the digestive organs.



of the brain, or an extravasation beneath the skull, frequently causes vomiting until relief is afforded to the brain. Disagreeable smells also cause nausea and vomiting. There is further a wonderful and intimate connexion, by sympathy, between the stomach and the skin. A diseased state of the liver, spleen, or of other glands, often excites unhealthy action in the stomach. Food, also, to which a person has been unaccustomed, often deranges its functions. Unwholesome water, and an impure atmosphere, have a very powerful and often speedy influence. The stomach moreover, although less liable than most parts of the body to organic disease, that is, such an alteration in the appearance of the organ itself as might be noticed with the eye, is nevertheless liable to considerable change of structure. This, for instance, is stated to have been the case with Bonaparte.

We might go on mentioning causes to an indefinite length;—commencing a new series of them with worms, affections of the womb, intemperance, melancholy, or hypochondriasis, which, in treating of that disease, we have stated to depend itself not unfrequently very much on morbid action in the liver; but trust that the view offered, will be sufficiently intelligible, although a volume would not contain all that might be written, and that with pertinency, on the subject of indigestion.—There is, however, one other cause which must not be overlooked—that is, a depraved secretion of those juices or fluids, from the external coats of the stomach, by which principally and almost entirely, the process of digestion is performed.

Of the gastric fluid, we have already spoken in an early part of the work: this not only dissolves, but alters the quantities of all suitable articles of food, and when the stomach is left a long time without the reception of aliment, it preys upon that organ itself; it is the irritation produced by this fluid that produces the sensation of hunger. It has been demonstrated, that if a vomit be given to a person who has fasted for a length of time, say twenty-four or forty-eight hours, the portion of gastric liquor which is present in the stomach, is thrown up, and hunger is not felt until a new accumulation.

In some animals, the power of this liquor is much greater than in man; others, as birds, have gizzards, in which assistance, towards the digestion of hard substances, is afforded by trituration, which is the effect of strong muscular action. Drunkards, especially those who use alcoholic preparations, such as brandy, whiskey, &c. are almost uniformly subject to indigestion, if some other disease does not carry them off, before they have time sufficient to destroy the tone of the stomach. Those, also, to whom much medicine is unnecessarily administered when young, and who are brought up like hot-house plants, are often miserable victims to this disease, and others connected with it.

It is not uncommon that the finical, the timid, and affectedly delicate, bring on themselves dyspeptic symptoms by the ridiculous care which they take to avoid disease; for living any considerable length of time too much by rule, renders the smallest deviation dangerous; and as an ill regulated imagination will always be doing mischief, a firm belief, however foolish, in the existence of the premonitory symptoms of a disease, with a moderate share of quackering, will very frequently induce that or some other malady.

**SYMPTOMS.**—The forms of this disease are so various, and so often blended with other affections, that the symptoms are very diversified, and sometimes apparently contradictory.

The close connection of dyspepsia with another disease, has already been noticed under the article of consumption. It will be our endeavour here to view it in as isolated a state as possible.

The symptoms afforded by the patient's sensations, are by no means difficult to understand, nor are they easily mistaken. A sense of distention of the stomach, and often of the bowels after eating, acrid eructations, the victuals passing partly unaltered through the alimentary canal, a loss of appetite, thirst which is not quenched by drinking water, languor, and a dislike to mental exertion, with paleness of the face, a withered and dry state of the skin all over the body, and an

irritable state of the nervous system, with a furred tongue in the morning, are common symptoms of dyspepsia or indigestion.

These symptoms often are slight at first, perhaps only one or two are encountered at a time; they frequently yield to a mild cathartic, and the patient thinks but little of his disease. After a time, however, they occur more frequently, and the strength begins to fail, the mind is more disturbed, and the sleep is often little refreshing, being disturbed by unpleasant dreams. Despondency at this period often commences, the discharges by stool often assume a bilious or a dark appearance, and mucus frequently passes off with the evacuations.

When the bowels are costive, the urine is small in quantity and reddish; when they are loose or open, it flows more freely, and is lighter coloured.

There is often in this disease a deficiency of sensible and insensible perspiration; as the kidneys and skin take the same fluid from the blood, not unfrequently when the action of the latter is diminished, that of the former is increased in an equal ratio; owing to this cause, there is often also a greater discharge than usual from the bowels.

Other symptoms gradually occur, such as pains in the bowels, sometimes griping, a burning sensation in the stomach, a great loss of strength, and entire despondency; the pulse is often frequent but weak; other parts of the system sympathize or take on continuous disease to such an extent, that the original malady is almost forgotten, and the whole constitution of mind and body is eventually broken up.

**MODE OF TREATMENT.**—In the treatment of this disease, a proper diet is of the greatest importance: exercise also comes in as important under the medical plan.

Solid food, when taken, should be well chewed and diluted, by eating slow, with the saliva or spittle, before it is swallowed; neither should a person whose stomach is weak, eat after the appetite is satisfied—for food which the stomach is unable to digest, proves a fruitful source of irritation and of increase to the disease.

All articles of food which are difficult of digestion in health, should be avoided: all oily substances, except perhaps in some instances fresh sweet oil, are injurious. Medical writers agree that the flesh of full grown animals is more easy of digestion than that of young ones, which contains a greater quantity of mucilage. The flesh of geese, ducks, and the like is not easily digestible by a debilitated stomach. We recollect distinctly having some years since experienced a dangerous relapse into fever and dysentery, by eating imprudently of a roasted duck. Fish are not easy of digestion; new and hot bread is uniformly injurious: neither are potatoes converted with facility into nourishment; mealy ones are certainly the best, but turnips are preferable, although a vegetable diet almost uniformly generates acidity in this disease. Butter is hurtful, and cheese is still more so.

With regard to the use of alcohol in any form, such as brandy, gin, &c. we are aware that it is unnecessary for those who, in health, have not been accustomed to its use; but the mass of people are in the habit of using this stimulus when in health, to a greater or less degree, and it would be improper to deprive invalids altogether of this support, when they are already reduced by disease and weakness, unless some absolute reason exists for prohibiting it: indeed at times, independent of the above consideration, it is not without use as a remedy; sound wine is the best form in which it can be given.

Exercise should not be used immediately after eating, and never so as to overfatigue the patient. Sailing, or rather a long sea voyage, is one of the best remedies for this disease.

Dr. Wilson Philip objects to the use of emetics in this complaint, excepting at the commencement, for the purpose of unloading the stomach; it is mostly necessary that at this time they be followed by a mild cathartic. When eructations or belchings, of which we have spoken, with acidity in the stomach, prevail, calcined magnesia and lime water are very useful. The magnesia will operate downwards with an effect generally proportioned to the amount of acid in the passages, and the lime water, which is somewhat astringent, is excellent when there is



a disposition to diarrhœa. Where there is much sickness of the stomach, with a tendency to vomiting, the common saline draught, taken in an effervescing state, will frequently be found useful.

It is occasionally necessary to use opium or laudanum in this disease, for the purpose of relieving the pain, but it is not other ways useful; on the contrary it is injurious, as it adds to the cause of indisposition.

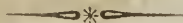
We have hitherto noticed some medicines calculated to afford relief during the paroxysms, but it is of more importance to prevent their recurrence: for this purpose, bitters and astringents, with alteratives, are generally relied on. Of bitters, the Peruvian bark, columbo, gentian, and especially quassia, are to be preferred: of astringents, iron, sulphuric acid, and the white vitriol in very small doses. Among the alteratives generally recommended, one grain doses of calomel, combined with very small portions of opium, may be used so as not to salivate; or very small and repeated doses of ipecacuanha, or of tartar emetic, used so as to excite an action on the surface, but not to nauseate. These latter medicines tend to equalize excitement and to arouse the action of the secretory and excretory vessels throughout the system. The purer bitters, especially such as quassia and gentian, are generally found more useful than astringents, which have many of them a tendency to increase the inactivity of the bowels.

When other organs besides the stomach and the rest of the alimentary canal become affected, or when the disease has emanated from some known organic cause located elsewhere, good sense must teach, from what has been written concerning other forms of disease, the proper remedies, which should be directed against the present symptoms, or the original cause, if it continues to exist. Thus, if the liver or brain exhibits evidences of a diseased state, medical means should be used accordingly.

Those who have written on the subject of dyspepsia, or indigestion, with the view of communicating information to physicians themselves, have very properly systematized and subdivided in description the various de-

pendencies and connections of this multiformed disease. This mode of treating the subject does not, however, come within our plan, neither perhaps would it be generally useful; dilating too much upon a species of disease, which can scarcely ever be perfectly understood, would exclude other matter equally interesting and more plain. We will add, however, that especially after dyspepsia has progressed for some time, either nervous or bilious symptoms, (and sometimes both at once,) very frequently appear: hypochondriasis, of which we have already treated, is very often subjoined.

A moderate use of stimulants and tonics, after proper evacuations and alterative means have been used, a pure and pleasant air, cheerful company, suitable exercise attended with amusement, and excursions of pleasure are considered beneficial. In the eastern states it is very common to stay even months at the sea shore; and long sea voyages, where there are comfortable accommodations, we believe will be found the general means best adapted to the cure of this complaint.



## OF THE PALSY.



THIS is a diminution or total loss of sensation or motion, or of both, in one or more parts of the body. It is attended by a greater or less degree of danger, according to the importance of the part affected. A palsy of the heart, lungs, or any part essential to life, is necessarily mortal. When it affects the stomach, the intestines, or the bladder, it is highly dangerous. When the part affected feels cold, is insensible, or wastes away, or when the judgment and memory begin to fail, there is but little hope of a cure.

**CAUSES.**—The immediate cause of palsy is any thing that prevents the regular exercise of nervous influence upon any particular muscle or part of the body. The occasional and predisposing causes are various, as drunkenness, wounds of the brain or spinal marrow, pressure upon the brain or nerves, very cold or damp air, the suppression of customary evacuations, sudden fear, want of exercise, or whatever greatly relaxes the system, as drinking much tea or coffee. The palsy may likewise proceed from wounds of the nerves themselves, or from the poisonous fumes of metals, as mercury, lead, and arsenic.

**SYMPTOMS.**—An attack of the palsy is occasionally preceded by a numbness, coldness, paleness, and slight convulsive twitches; but more usually there takes place a sudden and immediate loss of sensibility and power of motion in the part. The eyes and mouth are frequently drawn obliquely aside, and the speech, if not wholly taken away, is indistinct and incoherent.

**MODE OF TREATMENT.**—In young persons of a full habit, the palsy should be treated in the same manner as the sanguineous apoplexy. The patient must be bled, blistered, and have his bowels opened by sharp clysters or purgative medicines. But, in old age, or when the disease proceeds from relaxation or debility, which is generally the case, a very different course must be pursued. The diet must be warm and invigorating, seasoned with spicy or aromatic vegetables, as mustard, or horse-radish. The drink may consist of good wine, mustard whey, or brandy and water. Frictions on the part affected, with the flesh-brush or a warm hand, are often beneficial. Blisters may likewise be applied with advantage. When this cannot be done, the limb may be rubbed with the volatile liniment. If the tongue is affected, the patient may gargle his mouth frequently with a strong infusion of horse-radish, or he may chew ginger or other warm spices.

If the complaint has arisen from the fumes or the introduction of poisonous metals into the system, in addi-

tion to active stimulating purgatives and clysters, mercury, which has been found an excellent antidote to the effects of lead, should be employed, as we have already suggested, when treating on the subject of painter's colic.

Sometimes palsy of the lower extremities is the consequence of injuries sustained by the spine. In many cases of this description no benefit has been derived from any mode of practice hitherto pursued; in some instances, however, where the injury sustained is not very material, recovery may be greatly facilitated by the formation of caustic issues on each side of the spine, as near the part affected as possible. Issues may be easily formed, by cutting in a piece of leather a hole equal to the size of the issue to be formed, then applying it over the affected part, rub with the caustic potash moistened, that part of the skin which appears through the opening of the leather. As soon as the slough comes away, and a sufficiently deep ulceration is formed, the sore should be kept from healing, by pressing in its centre a pea or bean, or almost any hard body that will irritate the part, and prevent its healing. The running should be kept up as long as the symptoms demand.

Exercise is of great importance in palsy. If the patient is able to walk, he should take that exercise daily; but if deprived of the use of his limbs, he should be carried abroad in a carriage. Flannel should always be worn next to the skin, and cold drinks strictly avoided. During the winter, paralytic persons, if their circumstances admit of it, should reside in a warm climate.



## OF TETANUS, OR LOCKED-JAW.



IN this complaint there is a painful contraction of the muscles of the neck and trunk of the body; those of the jaw are also particularly affected, and the teeth by this contraction become so closely set together, as not to admit the smallest opening between them. This peculiar symptom has given to the disease the appellation of locked-jaw.

As every part of the muscular system is liable to this spasmodic contraction, systematic writers have thought proper to bestow different names on the disease, according to the various parts affected; but it will be sufficient for practical purposes, simply to notice the general characters and treatment of the disorder.

These spasmodic complaints affect both sexes, and no age is exempted from their violence. They affect the male oftener than the female, and more particularly those who inhabit warm countries; indeed it may occur in almost every climate during the warm season of the year.

**CAUSES.**—Tetanus, or locked-jaw, is either symptomatic or original. It is often a consequence of some irritation of the nerves from local injury, as punctures, lacerations from gun-shot wounds, or from the various surgical operations.

Wounds in any part of the body may be succeeded by this disease, but more particularly those in tendons. A trifling injury will not unfrequently produce this complaint, when it is least expected; whereas, at other times, a wound of considerable magnitude, under apparently similar circumstances, will produce no such effect.

Cold, when accompanied with moisture, will produce this disease; particularly when the body is exposed while asleep, on a damp pavement, or in a damp cellar, immediately after being heated and fatigued by exercise.

**SYMPTOMS.**—This disease, when it is the effect of exposure to cold, often comes on suddenly; but when it arises from a wound, it gradually commences about the tenth, fourteenth or twentieth day after the accident. It often comes on at a time when the wound gives but little uneasiness, and appears to be nearly healed. The patient first complains of an uneasy sensation at the lower part of the breast-bone, with a stiffness in the muscles, of the back part of the neck, and of the lower jaw, which increase with a painful sensation at the root of the tongue, and a slight difficulty of swallowing; but no appearance of swelling can be observed in the throat.

The muscles of the back now become rigid; this rigidity in a short time extends to those of the neck, attended with a pain in the direction of the spine of the back. At length the head, neck, and backbone are forcibly bent backwards, and the body becomes fixed in that position.

The muscles of the jaw are now violently affected, so that it is impossible for the patient to swallow any nourishment. Even liquids, when admitted into the cavity of the mouth, are thrown forcibly back through the nose. These symptoms generally take place on the second or third day, when the body is frequently seized with violent convulsive spasms, the pain at the lower part of the breast bone increases, and shoots through towards the back.

The muscles of the limbs now become rigid, and the body is so much bent backwards as to rest on the back part of the head and heels; as the disease advances the convulsive spasms become more violent. The pulse is generally frequent, and the other symptoms of fever are present, particularly when the disease is the consequence of cold. The bowels are generally costive; the urine is discharged with difficulty, and sometimes a total suppression of that evacuation takes place; the face is

pale, and expressive of great anxiety and distress. The patient is seldom, if ever, delirious; he sleeps but little, and from his slumbers he often awakes suddenly, with violent spasms. At length, the muscular system becomes more generally affected, and one universal convulsion closes the miserable existence of the patient.

**MODE OF TREATMENT.**—In our attempt to cure this disease, the indications are nearly the same, whether it has been produced by cold, or is the consequence of a wound, except when the wound is without swelling and inflammation. It should then be dilated and dressed, with lint dipped in warm basilicon, or any other stimulating application. After this, two, three, or even four grains of opium should be given three or four times a day, according to the urgency of the symptoms, and the power of the opium to produce sleep; astonishing quantities of this article may be sometimes given, without having the least tendency to make the patient slumber.

This remedy should be administered early, together with large quantities of Madeira wine, before the swallowing becomes interrupted; and the system should be charged with mercury, with as much expedition as possible. For this purpose, two or three drams of mercurial ointment must be rubbed into the inside of the legs, thighs, and arms, morning and evening, and likewise into the muscles more particularly affected with spasms. To co-operate with these medicines, the cold bath must be used, or cold water thrown over the body. The bowels should be kept open with calomel, castor oil, and clysters.

All those remedies must be used at an early period of the complaint, so as to make as effectual a resistance as possible to this very formidable disease, which too frequently terminates in the death of the patient, notwithstanding every effort to save him.

## OF THE EPILEPSY,

OR

## FALLING SICKNESS.



THE epilepsy consists of a sudden deprivation of all the senses; the patient falls suddenly down, and is affected with violent convulsive motions. Children, especially those who are delicately brought up, are most subject to it. It more frequently attacks men than women, and is very difficult to cure. When the epilepsy attacks children, there is reason to anticipate its removal about the period of puberty. When it attacks persons after twenty years of age, its cure is difficult; but when after forty, relief is rarely to be expected. If the fit is of very short duration, and returns at very distant intervals, there is reason to hope; but if it continues long, and returns frequently, there is but little prospect of success. It is a very unfavorable symptom when the patient is seized with the fits in his sleep.

**CAUSES.**—The epilepsy is sometimes hereditary. It may likewise proceed from blows, bruises, or wounds on the head; a collection of water, blood, or serous fluids in the brain; tumours or concretions within the skull; excessive drinking; intense study; excess of venery; worms; teething; suppression of customary evacuations; too great emptiness, or repletion; violent passions or affec-



tions of the mind, as fear and joy; and from hysteric affections: it may also precede the eruption of small-pox or measles.

**SYMPTOMS.**—An epileptic fit is generally preceded by unusual weakness, pain of the head, dullness, giddiness, noise in the ears, dimness of sight, palpitation of the heart, disturbed sleep, and difficult breathing; the bowels are inflated with wind, the urine is in great quantity, but thin, the complexion is pale, the extremities are cold, and the patient often feels, immediately before the attack, as it were, a stream of cold air ascending towards his head.

In the fit, the patient generally makes an unusual noise; his thumbs are drawn in towards the palms of his hands; his eyes are distorted; he starts, and foams at the mouth; his extremities are bent or twisted various ways, and his urine and fæces are often involuntarily discharged. After the fit is over, his senses gradually return, and he complains of a kind of stupor, weakness, and pain of the head; but has no remembrance of what happened to him during his fit.

The fits are sometimes excited by violent affections of the mind, excessive heat, cold, or the inordinate use of spiritous liquors.

This disease, from the difficulty of investigating its causes, and from its very peculiar symptoms, was formerly attributed to the wrath of the gods, or the agency of evil spirits. In modern times it has often, by the vulgar, been imputed to witchcraft. It depends, however, as much upon natural causes as any other malady; and its cure may often be effected by persisting in the use of proper means.

**MODE OF TREATMENT.**—The intentions of cure must vary according to the cause of the disease. If the patient be of a sanguine temperament, and there is reason to fear an obstruction in the brain, bleeding and other evacuations will be necessary. When the disease is occasioned by a suppression of customary evacuations, these, if possible, must be restored; if this cannot be

done, others should be substituted in their place. Issues or setons in this case, have often a very good effect. When there is reason to believe that the disease proceeds from worms, proper medicines must be used to remove the offending cause. When it proceeds from teething, the bowels should be kept open by emollient clysters, the feet frequently bathed in warm water, and, if the fits prove obstinate, a blister should be placed between the shoulders. The same method is to be followed, when epileptic fits precede the eruption of the small-pox or measles.

When the disease is hereditary, or proceeds from a wrong formation of the brain, its permanent removal is not to be expected. When it is owing to a debility, or too great an irritability of the nervous system, such medicines as tend to brace and strengthen the nerves may be used, such as the Peruvian bark, and the other bitter vegetable tonics, with the various preparations of iron.

The flowers of zinc and white vitriol, have, of late, been highly extolled for the cure of epilepsy. These medicines will not answer the expectations which have been raised concerning them, yet in obstinate cases of this disease, they deserve a trial. The dose of either is from one to three or four grains, which may be taken in pills or in a solution, as the patient inclines. The best method is to begin with a single grain four or five times a day, and gradually to increase the dose as far as the patient can bear it.

Occasionally electricity is found beneficial in the treatment of epilepsy.

Epileptic patients ought, if possible, to breathe a pure and free air. The diet should be light, but nourishing.— They ought to drink nothing strong, to avoid water fowl, and likewise all windy and oily vegetables, as cabbage, nuts, &c. They should keep themselves cheerful, carefully guarding against all violent passions, such as anger, fear, or excessive joy.

Exercise is likewise of great use; but the patient must be careful to avoid all extremes either of heat or cold; all dangerous situations, as standing upon precipices, or riding on horseback, should be avoided, lest a fit should come on at the time, and endanger life.

## OF ST. VITUS'S DANCE.



THIS complaint, in some respects, resembles epilepsy; as the patient is much agitated with strong, involuntary, convulsive, muscular action—though the pains are, for the most part, confined to one side, and principally affect the arm and leg.

**CAUSES.**—Irritability of the nervous system, superadded to general weakness, teething, or worms, and affections of the mind, such as excessive fear, horror, and anger—are the most common causes of St. Vitus's dance. "It now and then," says Dr. Thomas, "arises from sympathy, or associating closely with those who labor under the disease." The complaint is rarely attended with dangerous consequences, unless when very violent, or when it runs on to epilepsy."

**SYMPTOMS.**—"The lower extremity is, at first, most affected; there is a kind of weakness or lameness in one of the legs, and although the limb be at rest, the foot is frequently agitated by involuntary motions turning it alternately outward and inward. In walking, the affected leg is not lifted as usual, but is dragged along as if the whole limb was paralytic; and when it is attempted to be lifted, the motion is unsteadily performed, becoming irregularly and ludicrously agitated."

"The motions of the arm, likewise, are variously performed; it is drawn, by convulsive retractions, in a contrary direction to that which was intended. If a glass of

liquor be put into the hand to drink, the person cannot direct it properly to his mouth, but uses many odd gestures, and when it reaches the lips, he drinks very hastily." The tongue also participates in the general disease, so that the articulation is rendered nearly unintelligible.

If the disease is of long continuance, the whole constitution becomes affected, sleep is interrupted, the faculties of the mind are gradually impaired, and the body and limbs become emaciated. When this complaint occurs in children, hopes may reasonably be entertained of its removal about the age of puberty; and even when it occurs in adult age, it is often carried off by a change in the mode of living.

**MODE OF TREATMENT.**—This will depend on the exciting causes of the disease. Where it occurs in weak and irritable habits, independent of any irritation from teething, worms, or acrid matter in the bowels, we should not employ evacuants, but depend entirely upon strengthening remedies, with a view to increase the tone of the system. When, however, it occurs in sound constitutions, in consequence of any of the above existing causes, this practice would be highly injurious.

In that form which prevails in debilitated habits, without any obvious irritating cause, the Peruvian bark, in small quantities, has been given advantageously. The mineral tonics, such as the white vitriol, the tincture, and other preparations of iron, in connection with the daily use of the cold bath, have, however, been more efficaciously prescribed, than the bitter vegetable tonics. After some degree of firmness has been thus imparted to the constitution, antispasmodics are found beneficial: of these, opium, musk, and camphor, have been used with advantage. During this course, if costiveness prevails, it should be removed by some gentle cathartic.

When this affection depends, as it undoubtedly often does, upon local irritation, and not on debility, we should commence the treatment by the removal of the offending cause. When it arises from hardened feculent matter in the intestines, this should be removed by the frequent



administration of some active cathartic, such as combinations of calomel and jalap, and the like. When it arises from worms, these should be removed by the appropriate remedies hereafter to be fully mentioned. When it occurs in children during dentition, the gums should be lanced, and if this is not effectual, the irritating tooth should be extracted.

Dr. James Hamilton, of Edinburgh, after having tried, in vain, the tonic and stimulant plan, which was originally pursued in almost every case of the disease, was induced to desert a practice which, when followed indiscriminately, so often proved hurtful. He conceived that the debility and spasmodic motions, hitherto considered the primary symptoms of the complaint, might depend upon a previous derangement of health, as indicated by irregular appetite and constipation of the bowels. Under this impression he resolved to alter the mode of treating the disease, and began to try the effects of purgative medicines, given regularly and in moderate doses.

The success of this new practice established, he remarks, the justness of his opinions. In the confirmed stages of the disease he found it necessary, in order to procure discharges of the hardened and offensive *fœces*, to employ active and powerful purgatives, given in successive doses, so that the last might support the effect of the former. In the first stage of the complaint, however, while the intestines still retained their sensibility, and before the accumulation of *fœces* was great, gentle purgatives, repeated occasionally, readily effected a cure, or at least prevented the full formation of the disease.

Even after we have produced a regular appetite for food, an increasing aptitude for firmer motions, the restoration of articulation; the power of deglutition, and a renovation of flesh and strength, Dr. Hamilton supposes an occasional stimulus from purgatives will be required.

A disordered state of the bowels is, undoubtedly, a frequent cause of this disease, and where this is the case, the principles advanced by this highly respectable writer, are certainly correct. We cannot, however, for a moment, suppose that every case has been induced by the same species of irritation, or that the same remedy can

apply indiscriminately to all. An irritation in any part of the system may be equally capable of exciting these convulsive motions; in the cure, therefore, our object should be first to investigate the source of irritation, and to prescribe accordingly.

Whenever the disease appears to be one of debility, the diet should be generous, but, at the same time, easily digestible.



## OF FAINTINGS, OR SWOONINGS.



These consist in a diminished action of the heart and lungs, and, sometimes, apparently, a total cessation of the pulse and respiration during the continuance of the attack.

People of weak nerves, and delicate constitutions are most liable to swooning or fainting fits; though, indeed, they are sometimes found from peculiarity of constitution in those who are otherwise strong and robust. In such persons, not unfrequently, the sight of wounds, and even of blood drawn from the arm, will, for a time, cause a partial cessation of the functions of life.

Swoonings are rarely dangerous when duly attended to; but, when neglected or improperly treated, they often prove hurtful, and in weak constitutions, sometimes fatal.

The most frequent causes of swoonings are sudden transitions from cold to heat, breathing air that is deprived of its proper spring or elasticity, great fatigue, excessive weakness, loss of blood, long fasting, fear, and other violent passions and affections of the mind.

When a person falls into a swoon, the first object is to

remove him to a cooler apartment, and to sprinkle his face with cool water or vinegar. All tight clothes should be loosened, and the patient laid on his back, with the head hanging somewhat lower than the body. After this, the nostrils and temples should be stimulated with vinegar and spirits of camphor, or of hartshorn. The extremities may, also, be well rubbed with soft flannel, or a flesh brush; and as soon as the patient has sufficiently recovered to swallow, a glass of wine, or a little of any other cordial may be given. If no spirituous liquors are at hand, fifteen or twenty drops of the spirits of hartshorn in a glass of water may be substituted.

As soon as the fit has gone off, the next object will be to attend to the exciting cause of the complaint. If the patient is of a robust habit, and appears to have been overcome by a redundancy of blood, it will be advisable to detract from the arm a quantity proportioned to the necessity of the case; this, however, should not be resorted to during a continuance of the fit, unless the urgency of the symptoms absolutely demand it.

When the attack appears to be dependent on indigestion, or any other affection of the stomach, upon its removal, an emetic should be given with a view to overcome the existing evil.

When the fainting is connected, as is frequently the case, with any nervous affection, or when it arises from any violent emotion of the mind, or has been occasioned by mixing in crowded assemblies, which in persons of delicate constitutions is by no means uncommon, the plan already suggested should be here adopted, of removing the patient to some cool situation, placing him horizontally, with his head low, and stimulating the nostrils with the volatile salts.

When the disease is a consequence of great prostration of strength, or defective excitement, the constitution should be invigorated, not only by generous diet, with the use of wine and carriage exercise, but also by a course of tonic medicines. The Peruvian bark and the stomachic bitters, conjoined with the chalybeates, promise, in this case, to answer exceedingly well.

Persons liable to swoonings or fainting fits, should en-

deavour to avoid what appear to be their exciting causes, as frequent recurrences of such attacks materially affect the constitution.



## OF THE NIGHT-MARE.



THIS distressing affection always attacks the person during sleep, and appears to be dependent on indigestion, or a stagnation of blood in the brain or lungs.

The patient imagines he feels an uncommon weight about his breast or stomach, which he cannot shake off; he groans and sometimes cries out, though more frequently he attempts to speak in vain. He perhaps supposes that his life is in danger from causes which he has an inability to avoid, for he feels as though his limbs were incapable of any motion. After a short time, the oppression on the breast becomes more insupportable, the patient occasionally imagines that some object of terror is seated there, impeding his respiration, and destroying all voluntary motion. He attempts to throw off the object of his dread, but all to no purpose; he moans sadly, and has frequently severe palpitations of heart; the eyes are half open, and there is a ghastly expression of countenance. He generally awakes while starting at some imaginary evil.

Persons of weak nerves, those who lead sedentary lives, and high livers, are most liable to this affection. Nothing tends more to its production than heavy suppers eaten late at night, or before retiring to rest.

Flatulency is also a frequent cause; those persons, therefore, who are subject to this complaint, should not indulge in food of a windy nature. Deep thought, anx-



xiety, and all distressing affections of the mind, are to be considered exciting causes, and of course should be, as much as possible, avoided.

The night-mare has commonly been considered a trifling complaint, unworthy of serious attention; but it is by no means improbable, that many of those who have died in the night, without any assignable cause, have been destroyed by it.

Persons subject to the night-mare, should, besides abstaining from the above mentioned exciting causes, take regular and sufficient exercise throughout the day, and court cheerful society. Those who are young and of a full habit, ought to keep their bowels freely open by the occasional use of half a dram of magnesia, with a few grains of rhubarb. Where, on the contrary, there is much debility and langour in the habit of the patient, he should daily take tonic and stomachic bitters. When there is much wind generated in the stomach, in addition to these medicines, a few grains of ginger, mixed with a little magnesia, may be taken at bed time, in a wine glassful of peppermint or cinnamon water.



## OF FLATULENCIES, OR WIND.



ALL nervous patients, without exception, are afflicted with wind or flatulencies in the stomach and bowels, which arise chiefly from the want of tone or vigour in these organs. Flatulent articles, such as green peas, beans, and cabbages, may increase this complaint; but strong and healthy people are seldom troubled with wind,

unless they either overload their stomachs, or drink liquors that are in a fermenting state, and consequently full of elastic air. While, therefore, flatulence proceeds from our aliment, the cause which makes air separate from it, in such a quantity as to occasion these complaints, is almost always dependent on the bowels themselves, which are too weak either to prevent the production of elastic air, or to expel it after it is produced.

To relieve this complaint, such medicines ought to be used as have a tendency to expel wind, and by strengthening the bowels, to prevent its being produced there.

The list of medicines for expelling wind is very numerous, but they often disappoint the expectations of both the physician and his patient. The most celebrated among the class of carminatives are juniper-berries, the roots of ginger, the seeds of anise, caraway, and coriander, ether, gum asafœtida, and opium.

Dr. Whytt says, he found no medicines more efficacious in expelling wind than ether and laudanum. He generally gave the laudanum in a mixture with peppermint-water and sweet spirits of nitre. Sometimes, in place of this, he gave opium in pills with asafœtida. He observes, that the good effects of opiates are equally conspicuous, whether the flatulence be contained in the stomach or intestines; whereas, those warm medicines, commonly called *carminatives*, do not often give immediate relief, except when the wind is in the stomach.

With regard to ether, the Doctor says, he has often seen very good effects from it in flatulent complaints, where other medicines failed. The dose is a tea spoonful, the quantity to be gradually increased as the stomach can bear it: a sufficiency of water may be added to make it agreeable to the patient. In gouty cases, he observes, that ether, a glass of French brandy, or ginger, either taken in substance, or infused in boiling water, are among the best medicines for expelling wind.

For strengthening the stomach and bowels, and lessening the production of flatulence, the Peruvian bark, bitters, chalybeates, and exercise, have been recommended. In flatulent cases, some nutmeg or ginger should be added to the tincture of bark and bitters.

When windy complaints are attended with costiveness, this unpleasant symptom may often be removed by the repeated administration of gentle laxatives.

In those flatulent cases, which come on about the time the menses cease, repeated small bleedings often give more relief than any other remedy.

With regard to diet, all flatulent articles are to be avoided; and the drink should consist of water with a little whiskey or brandy, which are preferable to malt liquor, and in most cases to wine.

Exercise, however, is of more consequence than all medicine, both for preventing the production, and likewise for expelling of flatulencies. These effects are not to be expected from sauntering about, or riding in a carriage, but from labour, or such active amusements as give exercise to every part of the body.



## OF THE ITCH.



THIS unpleasant complaint is mostly communicated by infection, yet it seldom prevails where due regard is paid to cleanliness, fresh air, and wholesome diet. It generally appears in form of small watery pustules, first about the wrists, or between the fingers; afterwards it affects the arms, legs, thighs, and other parts of the body. These pustules are attended with an intolerable itching, especially when the patient is warm in bed, or sits by the fire. Sometimes, indeed, the skin is covered with large blotches or scabs, and at other times with a white scurf, or scaly eruption. This last is called the dry itch, and is the most difficult to cure.

The itch is seldom a dangerous disease, unless when rendered so by neglect or improper treatment. If suffered to continue too long it may injure the general system; and, if suddenly driven in, without proper evacuations, it may occasion fevers, inflammations of the viscera, or other internal disorders.

The best medicine for the itch is sulphur, used both externally and internally. The parts most affected may be rubbed with an ointment made of the flowers of sulphur, two ounces; crude sal ammoniac finely powdered, two drams; hog's lard or butter, four ounces. If a small quantity of the essence of lemon be added, it will entirely take away the disagreeable smell. About the bulk of a nutmeg of this may be rubbed upon the parts affected at bed time, two or three times a week.

Before the patient begins to use the ointment, he ought, if he be of a full habit, to lose blood or take a purge. It will likewise be proper, during the use of it, to take every night and morning as much of the flour of brimstone and cream of tartar, in a little molasses or new milk, as will keep the body gently open. He should beware of catching cold, should wear more clothes than usual, and take every thing warm. The same clothes, the linen excepted, ought to be worn all the time of using the ointment; and such clothes as have been worn while the patient laboured under the disease, are not to be used again, unless they have been fumigated with brimstone, and thoroughly cleaned; otherwise, they will communicate the infection anew.

Sir John Pringle observes, "that though this disease may seem trifling, there is no one in the army that is more troublesome to cure, as the infection often lurks in clothes, and breaks out a second, or even a third time. The same inconveniency occurs in private families, unless particular regard is paid to the changing or cleaning of their clothes, which last is by no means an easy operation."

"I never knew brimstone," says Dr. Buchan, "when used as directed above, fail to cure the itch; and I believe that if duly persisted in, it never will fail; but if it be only used once or twice, and cleanliness neglected, it is no wonder if the disorder returns." The quantity of



ointment, mentioned above, will generally be sufficient for the cure of one person; but if any symptoms of the disease should appear again, the medicine may be repeated. It is both more safe and efficacious when persisted in for a considerable time, than when a large quantity is applied at once.

The practitioner ought to be extremely cautious lest he should take other eruptions for the itch: as the stoppage of these may be attended with very injurious consequences. Many of the eruptive disorders to which children are liable, have a near resemblance to this disease; and infants have been destroyed by being rubbed with greasy ointments that made these eruptions strike in suddenly, which nature had thrown out to preserve the patient's life, or prevent some other malady.

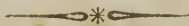
Those who wish to avoid this detestable disease, ought to beware of infected persons, to use wholesome food, and to study universal cleanliness.

## A DISEASE RESEMBLING THE ITCH.

THERE is no region or extensive section of country which is divided from other parts by waters or mountains, that has not some forms of disease peculiar to itself, very often affecting new comers, while natives, or those climatized escape.

Some of these indigenous diseases are very dangerous; and others, comparatively trifling; of the latter description, is an eruption considerably resembling the itch, which is not uncommon in parts of Ohio, and other places in the Western States. If it be contagious, which we believe it occasionally is, under very favourable opportunities of communication, it is much less so than the genuine itch; as children having it on their hands, often attend school, play with the other children, and handle their books without the disease being communicated. If entirely neglected, it often, in time disappears of itself; in some instances, however, it is very troublesome, assuming more the appearance of a tetter than of the itch.

This disease has been ascribed to various causes, especially to the water; but, we believe, that there is not any positive information relative to this point. It is often difficult to remove, probably because too much attention is paid to external and local applications, and too little to those means which affect the general system. Repellent ointments are always, in this complaint, injurious, unless preceded by, and used in concert with evacuating medicines, as they have a tendency, more particularly than in the genuine itch, to throw the diseased action on some inward part. Moderate purges of jalap and cream of tartar, given every two or three days, are very useful. Sometimes small bleedings prove advantageous—washing the parts with soap-suds, and the occasional application of the common mushroom catsup, in addition to the above directions will, with a reasonable portion of patience effect a cure.



## OF THE HERPES, OR TETTER.



HERPES, or tetter, is an eruption of broad spots, of a pale or reddish colour, diffused over various parts of the surface of the body.

This eruption is very troublesome, on account of the itching sensations which the patient suffers from it; these spots afterwards run into each other, and discharge a thin serous fluid. After some time husky or scurfy scales appear, which slough off, leaving the under surface red; this process is frequently repeated until the disease is either removed by art, or goes off spontaneously, which indeed is rarely the case. As it is fortunately confined

to the skin, the general system, notwithstanding its tedious continuance, rarely if ever sympathises much with the affection, or suffers any material injury.

This disease is often produced by want of cleanliness, by too meager a diet, by damp unhealthy situations, and not unfrequently it occurs in persons constitutionally predisposed to it, independently of any of the above causes.

The external remedies proposed for this complaint are ointments made of the flowers of zinc, or of the white precipitate of mercury and fresh lard.

When the tetter is inveterate, internal remedies are often necessary; and here Fowler's solution, (mentioned in the Dispensatory,) may be given in doses of six or eight drops, gradually increasing the quantity to twelve, if the patient can bear it, three times a day. A decoction of sarsaparilla or guiacum is likewise beneficial, together with the mineral acids well diluted. A vegetable and milk diet should be used, and salt meats particularly avoided.

The warm salt bath, as it has a tendency to promote the excretions of the skin, will be found very serviceable in the treatment of herpetic eruptions. Indeed, in most cutaneous affections, it will be found an important auxiliary to internal means. During the continuance of the complaint, costiveness should be prevented by the occasional use of laxative medicines.

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## OF THE RING WORM.

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THIS is a cutaneous affection, unaccompanied by any disorder of the constitution. It is more frequently found in warm climates than in cold ones. It is supposed to be of a contagious nature, and in severe cases is often extremely difficult to remove.

The ring worm may be known by numerous small red pimples breaking out in a circular form, and containing a transparent fluid. When the body is heated by exercise, these pustules itch exceedingly, and upon being scratched discharge the fluid; this falling on the neighbouring parts, enlarges the surface affected.

The scalp is often a seat of the disease, though it is by no means confined to that particular part; the face, neck, shoulders, arms, and even the lower extremities, are sometimes attacked by this troublesome complaint. No inconvenience, however, is for the most part felt from it, except an unpleasant itching in the part or parts affected.


These unpleasant sensations may be greatly alleviated and the eruptions somewhat repressed, by the use of astringent and slightly stimulating washes. It has been a popular practice to besmear them with ink, but solutions of the salts of iron, copper, and zinc, such as the green, blue, or the white vitriol, will be found less filthy, and equally efficacious.

The ring worm often appears on the head in small red circles, which gradually increase in diameter, and form on their surface a branny scurf, the hair becomes loose and falls off, upon the slightest force being applied. After one circle has appeared, others may be expected soon to show themselves, until they come in contact with each other, and at length occupy nearly the whole scalp. Glandular swellings, and sometimes ulcerations, may be the consequence of neglect or improper treatment.

In this form of the ring worm, the part affected should be shaved closely every four or five days, and washed three or four times a day with a solution of white vitriol, or with a mixture composed of from half a dram to a dram of white vitriol, fifteen grains of sugar of lead, and six ounces of pure water. Where the disease is inveterate, and will not yield to common remedies, small doses of calomel, given with a view to its alterative effect upon the system, will be found efficacious.



## OF A SCIRRHUS, AND CANCER.



A SCIRRHUS is a hard, indolent knotty tumour, mostly occupying some part of the glandular system. It is sometimes fixed and immoveable, at others, less firmly attached to the surrounding integuments.

CAUSES.—These tumours appear to be dependent on various causes, such as suppressed evacuations. They occur not unfrequently in women about the period when the menstrual discharge ceases. They may likewise be occasioned by a long continuance of any of the depressing passions, as grief, fear, or religious melancholy; those who devote themselves to convents and monasteries in Europe are very liable to the complaint. Indolence, cold, blows, friction, and particularly unequal pressure in the dress of females, are also productive sources of scirrhus and cancer. Sometimes, however, the disease is owing to an hereditary disposition.

SYMPTOMS.—A scirrhus is usually considered a fore-runner of cancer, and may be known by certain external marks. The whole tumour has an irregular surface, is uncommonly heavy, and the skin covering it has a puckered appearance, with a bluish or leaden colour. The sensations are peculiar, and become gradually more and more severe. At first there is an itching in the part, but afterwards the pain is of a sharp, darting or lacerating kind, and by some compared to the gnawing of an animal.

This state of the disease often continues for months, and even years, without material alteration. At length, however, there is discharged a thin foetid fluid, so extremely acrimonious as to excoriate and ulcerate the neighbouring parts. A large cavity is not unfrequently thus formed, and from it is discharged an offensive, bloody, and ill conditioned matter. In a short time this cavity is filled by a fungous growth, which often protrudes beyond the edges of the ulcer. This excrescence is so very irritable, that it often freely bleeds from the slightest touch.

Around the ulcer the skin is of a purplish colour and the edges are very hard and irregular, while the surface of the sore has a dark and glossy appearance. As soon as a cancer proceeds to ulceration, the irritation is exceedingly great, and most patients sink in a few months under the hectic fever then induced. Others live for years without any considerable extension of the disease.

**MODE OF TREATMENT.**—Internal remedies are now generally acknowledged inadequate to the removal of cancerous affections, though the distressing symptoms may sometimes be alleviated thereby. The complaint, however, when in a scirrhus state, may often be arrested in its progress.

When a scirrhus appears, strict attention should be paid to the mode of living: all irregularity should be avoided, and the diet ought to be simple and cooling; any violence to the part affected should be carefully guarded against. When the tumour appears in the female breast especially, all pressure of the dress should be prohibited. The external air should be excluded by keeping the part warm with soft flannel or fur. Moderate exercise, so as not to cause fatigue, or to irritate the affected part, should be taken daily.

As soon as a hardened tumour is discovered in any suspicious situation, some blood, by cups or leeches, should be drawn from its immediate vicinity, and the operation repeated several times with proper intervals, if it affords any relief. It will be found useful, also, to rub gently over the swelling the bulk of a nutmeg of

weak mercurial ointment every night, and to keep the part cool by constant application of a solution of the sugar of lead. The bowels should be kept open by the administration of some gently laxative medicine.

The internal use of cicuta, or hemlock, in addition to the mercurial inunction, has been recommended by many respectable writers, and perhaps in this stage of the complaint, though it may not, of itself, remove the tumour, still, by its narcotic power, it tends to alleviate pain. The best preparation is the extract of the plant: this should at first be given in small doses of one grain twice daily, to be gradually increased until giddiness or nausea affects the patient; its use should then be suspended for a day or two, and again resumed in lessened quantities.

When the plan thus briefly stated has failed of producing the desired effect, and the tumour has become larger, with evident signs of its proceeding to suppuration and ulceration, it should be immediately removed by powerful caustics or the knife, unless it is firmly attached to important parts, from which it cannot be separated; or unless the general system has become essentially injured by the disease. This last may commonly be known by an enlargement of the glands in the neighbourhood of the part affected. When this is the case, an operation would give pain without any rational prospect of ultimate success.

When, from any cause, the disease has been permitted to run on to ulceration, and to affect the general system, the prospect of eradicating this painful malady is faint indeed; and our only objects will now be, firstly, to correct the acrimony and offensive smell of the discharge; secondly, to prevent as much as possible the adjacent parts from being affected; and thirdly, to soothe the irritability of the ulcer, and to alleviate pain.

To effect our first object, some of the mineral acids, such as the muriatic, may be used as a lotion, so diluted, that the application will cause little or no pain. One part of the acid to four or five of water will generally answer to commence with. The proportions may afterwards be regulated by the degree of irritability in the ulcer. With the same intention, the charcoal poultice,

made by adding four or five table spoonsful of the finely powdered charcoal to half a pound of the common bread poultice, may be applied. A poultice of boiled carrots, where the other articles cannot be procured, will have a beneficial effect.

To prevent the parts adjacent to the ulcer from being affected, narrow strips of linen, spread with some mild ointment, as that made with equal parts of beeswax and lard, should be applied around the edges of the ulcer, and a pledget of lint spread with the same, should be laid over the whole internal surface.

In order to soothe the irritability of the ulcer and alleviate pain, we should apply to the part a decoction of poppy heads, in which a little opium has been dissolved, or else add to the poultices above proposed a portion of laudanum. To ease the excessive pain under which the patient often labours, recourse should be had to the internal use of opiates; laudanum is most generally used, and the quantity given should be proportionate to the severity of the symptoms, and the degree of relief afforded.

A strong infusion of the common hop, which is used in preparing yeast, will often be found, in doses of a wine glassful every three or four hours, to afford relief in most disorders which are accompanied with much pain. A small bag of hops, also, which has been boiled in vinegar, or vinegar and water, placed under the head at night, will frequently cause sound and refreshing sleep. This article has, we think, been too much overlooked of late years in medical practice. Whilst it often relieves pain and produces sleep, it is preferable on several accounts to opium, as it neither constipates the bowels, nor has it a narcotic effect.

Malt liquors have been proposed for the usual beverage; these are not only grateful to the patient, but considered medicinal by some.

In every species of open cancer, it is advisable that the air should be entirely excluded from the ulcer, and to effect this purpose, oiled silk should be applied over the other dressings.

We conclude with a quotation from Professor Gibson.



as its authority affords an opportunity of directing inquiring minds to further investigation of this important subject.

“Within a few years past, Mr. Carmichael of Dublin, a highly respectable and intelligent surgeon, and one who appears to have enjoyed most ample opportunities of treating cancerous diseases, variously situated, and in different stages, unreservedly declares that he has effected complete cures by preparations of *iron* and of *arsenic*. Hitherto, (remarks professor Gibson,) this practice has not been pursued to any extent in the United States, but emanates from authority so deservedly high, as to entitle it justly to a fair trial.”



## OF POISONS.



WHEN there is good reason to believe that some poisonous article has been taken into the stomach, a skilful physician should be obtained as soon as possible. We shall not, here, take up the readers time with a detail of the mineral and vegetable substances which, when swallowed in very moderate quantities, cause death, nor attempt to delineate their various modes of operation, for this would be unprofitable to minds unprepared by previous studies, but will simply endeavour to lay down a general plan of treatment.

On this subject we acknowledge ourselves indebted to a recent work, written by J. A. PARIS, M. D. fellow of the Royal Society of London.

The cure of all poisons taken into the stomach, depends chiefly on discharging them as soon as possible.

Poisons belong either to the mineral, vegetable, or ani-

mal kingdom. Mineral poisons are, commonly, of an acrid and corrosive quality. Those of the vegetable kind are, generally, of a narcotic or stupifying quality. Poisonous animals communicate infection either by the bite or sting—this poison only produces effects when received into the body by a wound.

Whatever be the nature of the poisons received into the stomach, the patient's safety depends very much on promptitude of treatment. Those who waste time in searching for antidotes, of which there are very few, to particular poisons, will have cause to regret this occupation of their time, which might have been much better employed. Dr. Paris remarks,—“although several of the mineral poisons may be neutralized or decomposed by various re-agents, yet their destructive action is generally so rapid, that the mischief is effected before any chymical changes can avail; and, in other cases, the substances resulting from the chymical action are as poisonous as the original ingredients.” He suspects, also, and we feel confident, justly, that, under certain circumstances, the vital powers of the stomach are in direct opposition to those changes and decompositions which so readily and so uniformly take place in laboratories.

A very good plan, with especially the mineral poisons, is to drink, immediately, largely of warm milk and water, (sweet oil, also, is strongly recommended,) and, then, by every possible means, to excite vomiting; thrusting the finger down the throat, or inserting a feather and tickling it, will sometimes succeed; an emetic, however, should be given as soon as possible; and, where either can be obtained, twenty grains of white, or ten of blue vitriol, mixed with a small portion of water is to be preferred. If there be pain in the bowels, clysters should also be used.

Boerhaave first suggested the practice of emptying the stomach by means of an elastic syringe, inserted through the mouth or one nostril. Professor Physick, of Philadelphia, has long taught its use in certain cases. Where narcotic, or stupifying poisons have been taken, the use of this simple apparatus is often very efficacious—every surgeon knows how to employ it.

In cases of poisons from either mineral or vegetable substances, very much the same mode of treatment is to be pursued, and the exertions to continue the vomiting should not cease, so long as any of the offending article can be supposed to remain in the stomach or bowels. Opium or laudanum is not unfrequently taken, either by mistake or purposely. It is a valuable medicine when properly used, but an over dose is a strong poison. A large quantity of opium occasions great drowsiness, with stupor and apoplectic symptoms. It is important, in this case, to cause effectual vomiting, speedily. We have already intimated, that, in such cases, especially when emetics will not operate, the use of the elastic syringe is advisable. Dr. Mead recommends, in cases of narcotic poisons, besides vomits, acids—such as the juice of lemons or strong vinegar. It is a singular fact, that the workmen in the copper smelting works, and tin burning houses of Cornwall, in England, experience considerable immunity from the fumes of arsenic, which they inhale repeatedly, and which often proves fatal to horses and cows, in the neighbouring pastures, by the use of sweet oil, which seems, in this case, an antidote upon which they rely with confidence.

If the body remains weak and languid after the poison has been extracted, nourishing diet and cordials will be proper; but great circumspection is necessary, in order to avoid exciting inflammation. Generally, the patient ought, for some time, to live on simple and cooling nourishment: such as milk, broth, gruel, light puddings, and spoon meat of easy digestion, and an infusion of the slippery elm bark, or flaxseed tea, are very proper drinks.

## OF POISONED WOUNDS.



FROM the multitude of *certain* cures recommended for injuries inflicted by poisonous animals, one might suppose there existed no danger in the bite of the rattlesnake, or of the mad dog; but it may uniformly be noticed, that those diseases which are but imperfectly understood, and which in many cases bid defiance to medical and surgical art, afford the richest harvest to presuming Quacks; hence we find, coiled up in mystery and darkness, the numerous tribe of *Cancer Doctors*, &c. &c. who are highly gifted with that species of low cunning, which enables them to impose on ignorance and credulity.

No doubt many honest people, also, think that they have effected cures in certain diseases, when the disease did not exist, or else it would have passed away of itself.

Even the stings of the common honey bees, when these insects attack in large numbers are sufficient, at times, to kill; and there can be no doubt, but, that a man exposed, naked and unprotected, for a night, in certain seasons, and at certain places on the banks of the Mississippi, would be destroyed by the mosquitoes.

Although spiders are mostly harmless, yet, occasionally, much suffering has been owing to the bites of certain animals of this class. We have known, at least, one well authenticated instance in which a stout man, a slave in Beaufort District, South Carolina, lost his life by the bite of a spider in the scrotum; mortification took place, and could not be stopped. The scorpion, also, in hot climates, is very venomous. Two species of American



snakes, are known to be venemous—the rattle snake and the copper head. They are more particularly so in hot weather. It is supposed that their poisons are about equally malignant.

Repeated washings with salt and water are found, generally, useful in the bites or stings of insects; and olive oil, applied to the wound; the use of a ligature above the wounded part, and scarification and cauterization, even in hot climates, arrest the venom of the scorpion. Olive oil, administered internally, has been strongly recommended by eminent physicians, for the bites of poisonous serpents. Dr. Ramsay, late of Charleston, South Carolina, has stated, that, the volatile alkali, used internally, and applied to the wound will, in a short time, cure the bite of any snake, or the sting of a spider, or any other venemous insect. On the very respectable testimony of Mr. Ireland, (quoted by professor Gibson, of Philadelphia,) we mention, as a remedy for the bites of poisonous snakes, Fowler's mineral solution. Mr. Ireland gave this remedy to the extent of two drams every half hour, and repeated for four hours with the best success. The solution operated by vomiting and purging severely. It is the opinion of Dr. Gibson, that as an internal medicine, arsenic has been found, decidedly, the best.

When it is practicable, a ligature should be applied, immediately, very tight, between the part bitten, and the rest of the body; then a portion of flesh around the wound ought to be cut away with the knife, and afterwards, without delay, strong lunar caustic should be applied effectually to the part; the wound can then be poulticed or dressed with an ointment made of bees-wax and hog's lard.

We have known a dog that was bitten in the mouth by a rattlesnake, so that his head swelled almost immediately; cured by pouring down his throat large quantities of brine, and handsfull of salt.

The canine madness, commonly termed hydrophobia, although the dread of, and difficulty in swallowing water is not always present, is one of the most formidable diseases with which we are acquainted. The length of time between the reception of the virus or poisonous

influence, and the appearance of the disease is very uncertain, the wound inflicted by the teeth of the rabid animal often heals with facility, and appears to be entirely well before constitutional symptoms make their appearance.

The creatures naturally liable to contract this disease are, as far as we yet know, all of the dog kind, viz. foxes, wolves, and dogs. Hence it is called the *rabies canina*, or dog-madness. It so seldom happens that any person is bit by the two first, that they scarce deserve to be taken notice of. If such a thing should happen, the method of treatment is precisely the same as for the bite of a mad dog.

The symptoms of madness in a dog are as follow: At first he looks dull, shews an aversion to food and company; he does not bark as usual, but seems to murmur, is peevish, and apt to bite strangers; his ears and tail droop more than usual, and he appears drowsy. Afterwards he begins to loll out his tongue, and froth at the mouth, his eyes seeming heavy and watery. He now, if not confined, runs panting along with a kind of dejected air, and endeavours to bite every one he meets. If he escapes being killed, he seldom runs above three or four days, until he dies, exhausted with disease, hunger and fatigue.

This disease is most frequent after long, dry, hot seasons; and such dogs as live upon putrid stinking carrion, without having enough fresh water, are most liable to it.

When any person has been bit by a dog, the strictest inquiry ought to be made whether the animal was really mad. Many disagreeable consequences arise from neglecting to ascertain this point. Some people have lived in continual anxiety for many years, because they had been bit by a dog which they believed to be mad; but, as he had been killed on the spot, it was impossible to ascertain the fact. This should induce us, instead of killing a dog the moment he has bit any person, to do all in our power to keep him alive, at least, until we be certain whether he is mad or not.

Many circumstances may contribute to make people imagine a dog mad. He loses his master, runs about in

quest of him, is set upon by other dogs, and perhaps by men. The creature, thus frightened, beat and abused, looks wild, and lolls out his tongue as he runs along. Immediately a crowd is after him; while he, finding himself closely pursued, and taking every one he meets for an enemy, naturally attempts to bite in self-defence. He soon gets knocked on the head, and it passes currently that he was mad, as it is then impossible to prove the contrary.

This being the true history of a great part of those dogs which pass for mad, is it any wonder that numberless whimsical medicines have been extolled for preventing the effects of their bite? This readily accounts for the great variety of infallible remedies for the bite of a mad dog, which are to be met with in almost every family; though not one in a thousand has any claim to merit, yet they are all supported by numberless vouchers. No wonder that imaginary diseases should be cured by imaginary remedies. In this way, credulous people first impose upon themselves, and then deceive others. The same medicine which was supposed to prevent the effects of the bite, when the dog was not mad, is recommended to a person who had the misfortune to be bit by a dog that was really mad. He takes it, trusts to it, and is undone.

**SYMPTOMS.**—The symptoms of canine madness vary, considerably, in different patients. Very often the original wound has healed, when a soreness or itching is felt at the place, accompanied with some degree of chilliness;—the patient becomes heavy and listless; his sleep is unquiet, with frightful dreams; he sighs; looks dull, and loves to be alone. When he attempts to swallow liquids, he is seized with an indescribable horror, and convulsive movements of the throat. The fear of water, however, as already mentioned, is not uniformly an attendant of this disease.

We know not of a certain cure for this disease, although there are instances recorded in which it is stated to have been cured; and, therefore, we will direct our attention, particularly, to preventive means.

It is advisable to remove the bitten or mangled portion of flesh, immediately, and that not with a fearful or sparing hand. Professor Gibson, recommends, when the teeth perforate between the bones of the hand or foot, so as to render it impracticable to remove all the injured, soft, parts, that amputation should be resorted to without delay. He recommends further, by way of security, after incisions have been made, and the bleeding suppressed, the application to the wound or wounds, of lunar caustic, or what he supposes still better, equal parts of white arsenic and sulphur, a remedy introduced by Mr. Clure, one of the ablest surgeons in Europe, and extolled by Sir Everard Home, as extremely valuable when used, with skill, in cancer. This is the most powerful caustic employed in surgery.

The above operations should be resorted to even after months have elapsed, if the scar becomes sore and painful.

By the use of these means, the fears of the patient will pass away, or the disease, consequent to the bite, will be entirely prevented.

If the canine madness becomes established, different, and various remedies are recommended; and as, on this difficult subject, we distrust our own judgment, having had but little experience in the disease, we feel desirous to lean on the most eminent authorities. Opium; preparations of mercury, used so as to excite salivation; arsenic; camphor; the cold bath; and blood letting; have been used, it must be confessed, with uncertain success.

"Blood letting," says Professor Gibson, "has lately been extolled, in the highest terms, by Mr. Schoolbred, of Calcutta, and some facts adduced, by Mr. Tymongo, shew that taking away, at once, an immense quantity of blood, so that scarcely a pulsation can be felt, in either arm, has been attended with the most favourable result." Professor Physick, of Philadelphia, correctly termed by his colleague, (Dr. Gibson,) the Father of American Surgery, some years since, proposed, under the idea that many patients in hydrophobia died of suffocation, to open the windpipe, in order to sustain the breathing, until the remedies could be effectually tried.



That instances of persons recovering from this disease have been correctly recorded, we have not the least doubt. The means, moreover, which have been used in these cases, were of the most active nature; but more correct and definite information than we yet have, in relation to the treatment of canine madness, when it has once made its appearance, would be a very valuable addition to medical annals.



## OF MORTIFICATION.



WHEN a part of the body loses its natural heat, sensibility, and power of motion, and becomes of a brown or livid colour, it is affected with complete sphacelus or mortification. So long as any sensibility, motion, and warmth continue, the state of the part is termed a gangrene; this does not, invariably, end in complete disorganization.

CAUSES.—The causes of mortification are innumerable; among the most common, perhaps, are being placed near a fire after exposure to very severe cold; eating certain articles, especially vegetables, in a diseased state; neglected wounds, bruises, and ulcers, especially when there is a debilitated state of the whole system;—long continued pressure on some one part, impeding the circulation of the blood; very severe blows; lightning; gun shot wounds; burns, &c. &c.

SYMPTOMS.—The first symptom of mortification is, commonly, a sharp pricking pain; this is followed by

swelling, and a soreness of the part, which becomes of a dark or reddish colour; small vesicles or bladders form, often beneath the scarf skin, and contain a thin fluid. The constitution suffers, also, very soon, a considerable dejection; the countenance acquires a cadaverous appearance; the pulse become small, and sometimes irregular, much resembling that in typhus fever; the tongue is dry, and often brown; and cold sweats, diarrhœa, and delirium, with a jerking of the tendons, and hickupping (when the disease terminates fatally) close the scene.

When a red line is formed at the junction of the living and the dead parts, the latter are thrown off, new flesh sprouts out in granulations, and the patient recovers, if not weakened too much previously.

**MODE OF TREATMENT.**—It will not be practicable, here, to give more than general outlines in relation to the treatment of mortification. Under the head of local remedies, many applications have been, in times past, made to mortified parts, in the belief that tone could be imparted by them to the enfeebled, or almost disorganized flesh and vessels. Excepting in a plan which has been pursued by Dr. Physick for twenty-three years, and which has proved, in many instances, successful, we have little or no confidence in stimulating applications. His mode is, moreover, very essentially different from those to which we have alluded; it is simply to apply blisters large enough to cover the affected part, and a considerable portion of the adjoining or surrounding sound parts.

Amputation, when practicable, has also formerly been used to stop the progress of mortification, but experience has shewn this to be useless, until the mortification has previously stopped, for the progress of animal decomposition will commence again at the stump which is left, even when a red line has formed where the dead parts separate from the living. This operation should not be attempted until the constitution has recovered a degree of tone.

The practice of attempting to assist with a cutting instrument the separation of the mortified parts before

the connection between them and the living flesh is entirely broken, is very incorrect, as it causes pain, and risks a renewal of the sloughing.

When mortification is, apparently, but commencing, and where the scarf skin is elevated, in places, by a whitish transparent fluid, a mixture of lime water and sweet oil, gently and freely applied, will be found a very agreeable application.

Where there is ulceration and sloughing, or in other words a falling out of parts, causing an increased magnitude of the ulcer, with a fœtid smell, the local application of which, from experience, we can speak with most confidence, is the charcoal poultice. This is made by reducing lumps of charcoal to an impalpable powder, by pounding, and then mixing something more than an equal quantity, in bulk, of the charcoal, with a soft wheat bread and milk, or a corn meal poultice, made of very finely sifted flour; a little milk or water may be added if the charcoal thickens the poultice too much; some prefer adding a table spoonful of yeast. This poultice should be changed four, or at least three times, in twenty-four hours. If necessary, the part may be washed, without rubbing, with warm milk and water, but it ought not to be long exposed to the air.

The patient should, if practicable, have the benefit of a free and pure atmosphere, and all offensive matters and smells ought to be removed; burning a little vinegar in a hot shovel, will have a tendency to render more agreeable, the air of the room. In several cases of mortification, attended with peculiarly dangerous symptoms, such as a rapid sloughing, with exceeding prostration of strength, and a state almost of insensibility, we have been successful by the internal administration of powerful stimulants and tonics, together with the local applications above mentioned, according to the state of the pulse, and the effect produced on the progress of mortification. French brandy may be administered every hour, in the form of hot toddy or milk punch. Good sound wine is, also, useful. The aqua ammoniæ, or water of ammonia, in doses of from fifteen to twenty drops, may

be given, also, every two hours, with the addition, two or three times a day, of thirty drops of laudanum.

We have supported a female (whose previous habits had been entirely temperate, as regards the use of intoxicating articles,) several days, without her taking any food of consequence, by a bold and unremitting stimulating plan. Many parts of her body, when we first saw her, were in a state of mortification; she took very little less than a quart of strong brandy every twenty-four hours, besides wine, aqua ammoniæ, &c. As soon as a reaction was observed to take place in the system, the stimulant plan was gradually and cautiously diminished, and tonics, affording more permanent support, were administered, together with suitable nourishment, as soon as the stomach was in a condition fit to receive it; she recovered.

There can be no doubt, but that, the same quantity of alcohol, &c. given her when in health, would, without almost a miracle, have destroyed her; her situation, however, at that time was such, that the mode of treatment scarcely raised, sufficiently, her flagging pulse.

Many patients are lost by neglecting to keep up, through the night, and especially towards morning, the same action which had been supported through the day; this is a grievous mistake in the attendants. A person in a very low or feeble state should be waked up at the regular periods, day and night, that the remedies may be duly administered.

We advise prudence in the administration of these powerful agents, but would recommend to discard timidity, which, in one who attends the sick, is equally a foe to life with rashness.



## DISEASES OF WOMEN.



HAVING devoted as much room as the limits of this work will allow, to the consideration of those diseases and causes which influence, at times, both sexes and all ages, we calculate here to bestow some attention on affections which are peculiar to females.

Independent of that adaptation of form and functions, which capacitates females for bearing children, the whole structure of the animal economy in this sex averages far greater delicacy and liability to be put out of order than in men. Many diseases of females, however, (and often when it is little suspected,) are intimately connected with, and sometimes entirely dependent on, some derangement of the womb or its appendages. The sick person is herself not unfrequently ignorant of this, and at other times is deterred by feelings of false delicacy from entering into an explanation with her nearest friends, until a chronic and incurable disease has located itself so firmly that it cannot be removed.

Women, in all civilized nations, have the management of domestic affairs—and it is proper they should, as they are less fit for the more active and laborious employments. This indulgence, however, should not be carried too far, for females are often greatly injured by a want of suitable exercise and free air. Too much confinement injures their figure and complexion, relaxes their solids, weakens their minds, and disorders all the functions of the body. Hence obstructions, indigestion, flatulence, abortions, &c.

These not only unfit women from being mothers and

nurses, but often render them whimsical, and a burden to those around them. A sound mind, remarks Dr. Buchan, depends so much on a healthy body, that where the latter is wanting the former is rarely to be found.

That females in general take too little exercise in the open air, is evidenced by the health of those who in the country assist their husbands or parents in gardening, husbandry, and the like; such are often almost as hardy as their relatives of the male sex.

Whether it be strictly proper to enumerate the monthly evacuations of females, pregnancy, and child-bearing, among diseases, we will not pause to examine, but as they often influence strongly the feelings and condition of the system, and become, from improper management, sources of numerous calamities, it will be necessary here to consider them as at least deviations from the ordinary state of health.

## THE MENSTRUAL OR MONTHLY DISCHARGE.

Females in hot countries begin to menstruate at an earlier period than in countries that are colder, in some parts of the East, even at the age of eight or nine years. In our climate, this important change commences most frequently between the ages of thirteen and fifteen, and menstruation generally ceases at a period between the ages of forty-five and fifty. At the first appearance of this discharge, the change in the constitution is commonly for the better, but sometimes unhappily for the worse. The greatest care is therefore necessary, as the future health and happiness of the female depends in a great measure upon her getting safely past this important period of life.

It is the duty of mothers, and those who are intrusted with the education of girls, to instruct them early in the conduct and management of themselves at this critical period of their lives. False modesty, inattention, and ignorance of what is beneficial or hurtful at this time, are the sources of many diseases and misfortunes in life, which a few sensible lessons from an experienced ma-

iron might have prevented. Nor is care less necessary in the subsequent returns of this discharge. Taking improper food, violent affections of the mind, or catching cold at this period, is often sufficient to ruin the health, or to render the female ever after incapable of procreation.

If a girl about this time of life be confined to the house, kept constantly sitting, and neither allowed to stir about, nor be engaged in any active business, which gives exercise to the whole body, she becomes weak, relaxed, and puny; her blood not being duly prepared, she looks pale and wan; her health, spirits, and vigour decline, and she sinks into a valetudinarian for life. Such is the fate of numbers of those females, who, either, from too much indulgence, or their own narrow circumstances, are, at this critical period, denied the benefit of exercise and free air.

A lazy indolent disposition proves likewise very injurious to girls at this period. We seldom meet with complaints from obstructions among the more active and industrious part of the sex; whereas the indolent and lazy are seldom free from them. These are in a manner eaten up by the *chlorosis*, or green sickness, and other diseases of this nature. We would therefore recommend it to all who wish to escape these calamities, to avoid indolence and inactivity as their greatest enemies, and to be as much abroad in the open air as possible.

Another thing which proves hurtful to girls about this period of life, is unwholesome food. Fond of all manner of trash, they often indulge in it until the functions of the stomach become essentially impaired. Hence ensue indigestions, want of appetite, and a numerous train of evils. If the fluids be not duly prepared, it is utterly impossible that the secretions should go properly on. Accordingly we find, that such girls as lead an indolent life, and eat great quantities of unwholesome food, are not only subject to obstructions of the menses, but also to glandular affections, such as the scrofula or king's evil, &c.

A dull disposition is also very hurtful to girls at this period. It is a rare thing to see a sprightly girl who

does not enjoy good health, while the grave, moping, melancholy creature becomes the victim of hysterical and hypochondriacal complaints. Youth is the season for mirth and cheerfulness. Let it therefore be indulged. It is an absolute duty. To lay in a stock of health in time of youth is as necessary a piece of prudence, as to make provision against the decays of old age. While, therefore, wise nature prompts the happy youth to join in sprightly amusements, let not the severe dictates of hoary age forbid the impulse, or damp with serious gloom, the season destined to mirth and innocent festivity.

After a female has arrived at that period of life when the menses usually begin to flow, and they do not appear, but on the contrary, her health and spirits begin to decline, we would advise, instead of shutting her up in a house, and dosing her with steel, asafoetida, and other drugs, to place her in a situation where she can enjoy the benefit of fresh air and agreeable company. There let her eat wholesome food, take sufficient exercise, and amuse herself in the most agreeable manner; and we have little reason to fear, but that nature, thus assisted, will do her proper work.

This discharge in the beginning is seldom so instantaneous as to surprise females unawares. It is generally preceded by symptoms which foretell its approach, such as a sense of heat, weight, and dull pain in the loins; distention and hardness of the breasts; head-ache; loss of appetite; lassitude; paleness of the countenance; and sometimes a slight degree of fever.

After the menses have once begun to flow, the greatest care should be taken to avoid every thing that may tend to obstruct them. Females ought to be exceedingly cautious with regard to what they eat or drink at the time they are out of order. As it is impossible to mention every thing that may disagree with individuals at this time, we would recommend every female to be very attentive to what disagrees with herself, and carefully to avoid it.

Cold is extremely hurtful at this period. More diseases of females may be traced to colds, caught when out of order, than to any other cause. This ought surely



to put them upon their guard, and to make them very circumspect in their conduct at such times. A degree of exposure, that will not in the least hurt them at another time, will often at this period be sufficient to ruin their health and constitution.

The greatest attention ought likewise to be paid to the mind, which should be kept as easy and cheerful as possible. Every part of the animal economy is influenced by the passions, but none more so than the uterine system. Anger, fear, grief, and other affections of the mind, often occasion obstructions of the menstrual flux, which prove incurable.

From whatever cause this flux is obstructed, except in the state of pregnancy, proper means should be used to restore it. For this purpose, we would recommend sufficient exercise in a dry, open, and rather cool air; wholesome diet, and if the body be weak and languid, generous cordials; also cheerful company and other recreations. If these fail, recourse must be had to medicine.

When obstructions proceed from a weak relaxed state of the system, such medicines as tend to promote digestion, to brace the solids, and assist the body in preparing good blood, ought to be used. Iron and the Peruvian bark, with other bitter and astringent medicines, are often very useful. Filings of iron may be infused in wine, two or three ounces to a quart, and after it has stood for two or three weeks, it may be filtered, and about half a wine glass of it taken twice or thrice a day: or prepared steel may be taken in the dose of half a dram, mixed with a little honey, three or four times day. The bark and other bitters may either be taken in substance or infusion, as is most agreeable to the patient.

The seneca snake root has been strenuously recommended, as having a tendency to relieve suppressions of the menstrual discharge. A decoction of half an ounce of the dried root, with the addition of a little orange peel, or other aromatic, in a pint of water, may be drank, a wine glassful every two hours, at the time the patient is out of order; the feet may be soaked in lukewarm water, and the body ought to be kept warm:

An obstruction of the menses is often the effect of other

maladies. When this is the case, instead of giving medicines to force that discharge, which might be dangerous, we ought by all means to endeavour to restore the patient's health and strength. When this is effected, the regular evacuations will return of course.

But the menstrual flux may be too great as well as too small. When this happens, the patient becomes weak, the appetite and digestion are bad, the feet swell, and dropsies and consumptions often ensue. This frequently happens to women about the age of forty-five or fifty, and is very difficult to cure. It may proceed from a sedentary life; a full diet, consisting chiefly of salted, high-seasoned, or acrid food; the use of spirituous liquors; excessive fatigue; relaxation; violent passions of the mind, &c.

The treatment of this disease must be varied according to its cause. When it is occasioned by any error in the patient's regimen, an opposite course to that which induced the disorder must be pursued, and such medicines taken as have a tendency to restrain the flux, and counteract the morbid affections of the system from whence it proceeds.

To restrain the flux, the patient should be kept quiet and easy both in body and mind. If it be very violent, she ought lie in bed, with her head low; to live upon a cool and slender diet, as veal or chicken broths with bread, and to use astringent drinks, such as weak alum water with a few drops of laudanum, or a little elixir of vitriol in water.

That period of life at which the menses cease to flow, is very critical to the sex. The stoppage of any customary evacuation, however small, is sufficient to disorder the whole frame, and often to destroy life itself. Hence it comes to pass, that so many woman either fall into chronic disorders, or die about this time. Such, however, as survive without contracting any chronic disease, often become more healthy and hardy than they were before, and enjoy strength and vigour to a very great age.

If the menses cease suddenly in women of a full habit, they ought to abate somewhat of their usual quantity of food, especially of the most nourishing kind, as meat, &c.

They ought likewise to take exercise and keep the body open. This may be done by taking, once or twice a week, a little rhubarb, or some other mild cathartic.

It often happens that in women of a gross habit, at this period of life, ulcerous sores break out about the ankles, or in other parts of the body. Such ulcers ought to be considered as critical, and should either be suffered to continue open, or artificial drains ought to be substituted in their stead. Women, who have such sores dried up suddenly, are often soon after carried off by acute diseases, or fall into those of a chronic nature.

### THE FLUOR ALBUS, OR WHITES.

What is usually called the *fluor albus*, or whites, is a very common disease, and proves extremely hurtful to delicate females. This discharge, which is not always white, but sometimes ash coloured, greenish, or dark in appearance, and sharp and corrosive, is occasionally always present, and in other cases appears at irregular intervals. It is attended with a pale complexion, pains in the back, loss of appetite, swelling of the feet, and other symptoms of constitutional debility. The causes are various, and may be local or general.

Dr Buchan's advice for the treatment of this disease, we consider excellent. He says, the patient must take as much exercise as she can bear without fatigue. Her food should be solid and nourishing, but of easy digestion, and her drink rather generous. Port or claret wine mixed with lime water will be found useful. Strong broths have an exceeding good effect, and sometimes a milk diet alone will effect a cure. The patient ought not to be too long in bed; in warm weather the cold bath will be of considerable service. Thus far the Doctor.—The French have been much in the habit of using injections in this disease; and there is no doubt but that cleansing and somewhat astringent injections, when co-operating with means directed to the general system, may be found useful.

As medicine, half a dram of the Peruvian bark. with

eight drops of the elixir of vitriol, may be taken, if it be found necessary, in a glass of wine four times a day; or fifteen drops of the muriated tincture of iron may be given as often, in a sufficiency of water to dilute the acid, so as to prevent it from injuring the mouth and throat. Injections, if used, should at first be very mild, such as milk and water; afterwards a moderately strong infusion of oak galls may be administered, or six grains of white vitriol to a half pint of water. The mind should, if possible, be kept in a cheerful state: this mode of treatment, with suitable exercise and change of air, will effect a gradual cure.

### OF BARRENNESS.

THIS may be owing to a variety of causes, but is most frequently dependent on some obstruction or irregularity of the menstrual flux. It is sometimes caused by the fluor albus or whites; by high living, or by certain affections of the mind: such as grief, fear, &c. which have a direct tendency to obstruct the monthly discharges. It is certain, that among those who labour almost continually, we seldom find instances of barrenness, while with the affluent and indolent, those cases are far more common.

When the system is in a debilitated and relaxed state, exercise in the open air is recommended, with a diet consisting principally of milk and vegetables, and the moderate use of astringent medicines: such as elixir of vitriol, steel, alum, the Peruvian bark, and lastly the cold bath. Medicine of itself, in cases of barrenness, can seldom do much good; more depends upon diet and exercise. Dr. Cheyne, a celebrated English physician, asserts, that want of children is oftener the fault of the male than the female; and strongly recommends a milk and vegetable diet to the former as well as the latter, adding that his friend, Doctor Taylor, whom he calls the milk doctor of Croydon, had brought several families, in his neighbourhood, who had continued for some years after marriage without any offspring, to have fine children, by keeping



both parents, for a considerable time, to a milk and vegetable diet.

## OF PREGNANCY.

THE state of pregnancy is often attended with a variety of complaints which merit attention, and which not unfrequently require medical aid. Some females, it is true, are more healthy during pregnancy, than at any other time; but this is not commonly the case.

Pregnant women are often troubled with an uneasy sensation of heat or burning about the pit of the stomach, which is commonly called the heart-burn. The safest and best remedy for this complaint is small doses, say a tea spoonful at a time, of calcined magnesia; this may be followed by a glass of mint water, or a little ginger tea; sometimes simply chewing a little green tea, will afford relief; they are, likewise, in the more early periods of pregnancy, not unfrequently affected with sickness and vomiting, especially in the morning; in this case very moderate bleedings are occasionally serviceable, also mild opening medicines. Pregnant women are most apt to vomit immediately after getting out of bed, owing to the change of position and emptiness of the stomach: this may generally be prevented by taking some light breakfast in bed; if the stomach be weak, a little brandy, well diluted, may be allowed. The head-ach and tooth-ach are troublesome symptoms during pregnancy: the former may generally be removed by keeping the bowels gently open; in the treatment of this species of tooth-ach, it will be mostly found advantageous to use palliatives. Few fatal diseases, however, occur during this period, and scarcely any, except abortion, that can be called dangerous if judiciously managed.

It may be received as an established fact, that every mother who willfully procures an abortion, does it at the hazard of her life. This rule applies much more particularly to those who are guilty of this unnatural crime, than to the delicate and weakly female with whom proper means have been used to prevent, if possible, the catastrophe.

Every pregnant woman is more or less in danger of abortion. This should be guarded against with the greatest care, as it not only weakens the constitution, but renders the woman liable to the same misfortune afterwards. Abortion may happen at any period of pregnancy, but it is most common in the second or third month. Sometimes, however, it happens in the fourth or fifth. If it happens within the first month, it is usually called a false conception; if after the seventh month, the child may often be kept alive by proper care.

The common causes of abortion are, the death of the child; weakness or relaxation of the mother; great evacuations by bleeding or severe cathartic medicines; violent exercise; raising great weights; reaching too high; stepping from an eminence; excessive vomiting; coughing; convulsion fits; blows on the belly; falls; fevers; excess of blood; indolence; high living, or the contrary; violent passions or affections of the mind, as fear, grief, &c.

The signs of approaching abortion are, pain in the loins, or about the bottom of the belly; a dull heavy pain in the inside of the thighs; a slight degree of coldness, or shivering; sickness at the stomach, and palpitation of the heart; the breasts becomes flat and soft; and there is a discharge of blood or watery humours from the womb.

To prevent abortion, we would advise women of a weak or relaxed habit to use solid food, avoiding great quantities of tea and other weak and water liquors; to rise early and go soon to bed; to shun damp houses; to take frequent exercise in the open air, but to avoid fatigue; and never to go abroad in damp foggy weather, if they can shun it.

Women of a full habit ought to use a spare diet, avoiding strong liquors, and every thing that may tend to heat the body, or increase the quantity of blood. Their diet should be of an opening nature, consisting principally of vegetable substances. Every woman with child ought to be kept cheerful and easy in her mind. Her appetites, even though depraved, ought to be indulged as far as prudence will permit.

When any signs of abortion appear, the woman ought to be laid on a matress, with her head low. She should be kept quiet, and her mind soothed and comforted. She ought not to be kept too hot, nor to take any thing of a heating nature. Her food should consist of broths, rice and milk, jellies, gruel and the like, all of which ought to be taken cold.

If she be able to bear it, she should lose blood from the arm. The bleeding may be repeated if necessary. In general, opiates are of service; but they should always be given with caution. Dr. Paris recommends, strongly, that a suppository, or large oblong pill, composed of two parts soap, and one of opium, should be inserted into and retained in the rectum.

Sanguine, robust women, who are liable to miscarry at a certain time of pregnancy, ought always to be bled a few days before that period arrives. By this means, and observing the regimen above prescribed, they may often escape that misfortune.

Though we recommend due care for preventing abortion, we would not be understood as restraining pregnant women from sufficient exercise. This would operate unfavourably. Want of exercise not only relaxes the body, but induces a too great fulness of the vessels, which are the two principal causes of abortion. There are, however, some women of such delicate constitutions that it is necessary for them to avoid almost every kind of exercise during the latter part of pregnancy.

Pregnant women are more apt to escape epidemic diseases, fevers, and the like, than other persons; and when they are attacked, the complaint is seldom very violent; therefore it is not so necessary to use severe modes of treatment. It has already been intimated that drastic or violent purges are not safe for a female in a state of pregnancy. Where there is reason to suspect that this state exists, those who administer medicine should be very cautious and particular in making suitable inquiries, lest they unwittingly do serious injury. Sometimes even married women are ignorant of their condition for several months; and occasionally the unmarried endeavour to impose upon the credulity of those from

whom they think to obtain means that will relieve them from a load of shame. not estimating the danger to which they expose themselves.

## OF CHILD BIRTH.

It would be difficult, if possible, to mention a process connected with the healing art, which seems less understood among people, generally, than that of bestowing proper attention to females in labour, and after the expulsion of the child; the superstitious prejudices of ignorant and officious midwives and nurses appear, (in many country places especially,) to bid defiance to reason and common sense. Doctor Buchan seems to have been fully impressed with this opinion, when he made the following remark, which is often equally applicable in this part of the world:

“We can not help taking notice,” *he says*, “of that ridiculous custom, which still prevails in some parts of the country, of collecting a number of women together on such occasions. These, instead of being useful, serve only to crowd the house, and obstruct the necessary attention; besides, they hurt the patient with their noise, and often, by their untimely and impertinent advice, do much mischief.”

Nature, if left to herself, will seldom fail to expel the child, and then it is, emphatically speaking, that the judicious midwife and nurse are called upon to exert proper care and management for the recovery of the mother, and support of the infant. On the mechanical process, necessary to afford assistance to a woman taken with labour pains, we shall treat very briefly, presuming that every matron is acquainted with at least this part of the subject; and in labours that are actually difficult or preternatural, the assistance of a scientific accoucheur is indispensably necessary.

When the pains come on tolerably strong, the patient should lie on a matress or bed, in an horizontal position, with the legs some what drawn up; and proper support should be afforded, although violent exertion, on the part



of the female, ought to be discountenanced. The mode of treatment, in relation to bleeding, or the administration of mild cordials, must depend on the circumstances of the case, and the constitution of the patient. Much injury is, however, frequently done by the injudicious use of stimulant, or what are often termed *forcing medicines*, which often occasion, after the separation and expulsion of the *placenta*, or after birth, fevers, or violent and fatal discharges of blood.

After delivery, a wide bandage should be applied carefully around the woman's body, and she should be kept as quiet, and easy, as possible; her food should, generally, at first be light and thin: as gruel, panado, &c. If excessive flooding follows, the patient should be laid with her head low, and kept cool. Bleeding from the arm is often useful, and linen cloths, wrung out in cold vinegar and water, should be kept applied to the belly, loins, and thighs—they must be changed as often as they become dry. Flooding is, not unfrequently, consequent to the injurious practice of raising the woman, and suffering her to stand on her feet for some time, immediately after delivery, while her clothes are changed. Cleanliness can be attended to without the patient's being obliged to exert herself while in an enfeebled condition, and before the blood vessels of the womb have had time to contract.

Thirty drops of laudanum, or a one grain opium pill, should mostly be given after cases of favourable labour, in order that rest may be procured—if there is much pain, the dose may be increased. The pain and other unpleasant symptoms are often also alleviated, by bleeding in the arm.

After the child is born, and as soon as it breathes freely, but not before. (indeed, eminent practitioners recommend waiting until the pulsation in the cord has ceased,) a string, the size of a knitting needle, should be tied, tightly, around the navel string, at the distance of three fingers breadth from the child's body. Another should, then, be tied, in like manner, a little nearer to the after birth, and the navel string divided between them with a sharp pair of scissors. We have found the following simple dressing answer best for the child's

navel: take a square piece of linen rag, and grease it, on both sides moderately, with a clean tallow candle; cut a hole in it which will admit the portion of naval string which is attached to the child—this is to be wrapped up carefully, secured with a small compress, and pressed against the belly by a flannel bandage, sufficiently tight to keep its place, and prevent the danger of a rupture, when the child cries; the dressings ought not to be changed for three or four days.

An inflammation of the womb is a dangerous, and not unfrequent, disease, after delivery. It is known by pains in the lower part of the belly, which are greatly increased upon pressure; by the tension or tightness of the parts; great weakness; change of countenance; a constant fever, with a small and hard pulse; a light *delirium* or raving; sometimes, incessant vomiting; hickupping; a discharge of reddish, acrid, fluid from the womb; an inclination to go frequently to stool; a heat, and sometimes total suppression of urine. When other means fail to relieve the bladder from over distention, a female catheter should be introduced; this may be easily done by any prudent nurse.

This must be treated like other local inflammatory disorders, The drink should be thin gruel or barley water; in a cup of which, half a dram of nitre may be dissolved, and taken three or four times a day. Clysters of warm milk and water must be frequently administered, and the belly should be fomented by cloths wrung out of warm water, or by applying bladders filled with warm milk and water to it.

A suppression of the *lochia*, or usual discharges after delivery; and the milk-fever, must be treated nearly in the same manner as an inflammation of the womb. In all these cases, the safest course, when there is not a skilful physician in attendance, is gentle evacuations, and fomentations of the parts affected. In the milk-fever the breasts may be rubbed gently with a little warm linseed-oil, or the leaves of red cabbage may be applied to them. The child should be often put to the breasts, or they ought to be drawn by some other person.

Nothing would tend more to prevent the milk-fever

than putting the child early to the breast. The custom of not allowing children to suck for the first two or three days, is contrary to nature, and common sense, and is very injurious both to the mother and child.

Every mother who has milk in her breasts, ought either to suckle her own child, or to have her breasts frequently drawn, at least for the first month. This would prevent many of the diseases which prove fatal to women in child-bed.

When an inflammation happens in the breast, attended with redness, hardness, and other symptoms of suppuration, the safest application is a poultice of bread and milk, softened with oil or fresh butter.\* This may be renewed three times a day until the tumour is either discussed or brought to suppuration. The indiscreet use of repellents, in this case, is very dangerous; they often occasion fevers, and sometimes cancers; whereas a suppuration is seldom attended with any danger, and has often the most salutary effects. One or two smart purges are often useful.

When the nipples are fretted or chapt, they may be anointed with a mixture of oil and bees-wax, or a little powdered gum arabic may be sprinkled on them. Should the complaint prove obstinate, a cooling purge may be given, which generally removes it.

The celebrated Hoffman observes, that "the fevers of child-bed women might generally be prevented, if they, during their pregnancy, were regular in their diet, used moderate exercise, took now and then a gentle laxative of manna, rhubarb, or cream of tartar; not forgetting to bleed in the first months, if necessary, and to avoid all sharp air. When the labour is coming on, it is not to be hastened with forcing medicines, which inflame the blood and humours, or put them into unnatural commotions. Care should be taken, after the birth, that the natural excretions proceed regularly; and if the pulse be quick, a little nitrous powder, or some other cooling medicine, should be administered."

\* For *incipient* tumours and inflammation of the breast, before suppuration commences, the compound plaster of litharge, spread on leather, will often be found useful.

## PUERPERAL, OR CHILD-BED FEVER.

The most fatal disorder consequent upon delivery is the *puerperal*, or child bed-fever. It generally makes its attack upon the second or third day after delivery.— Sometimes, indeed, it comes on sooner, and at other times, though rarely, it does not appear before the fifth or sixth day.

It begins like most other fevers, with a cold or shivering fit, which is succeeded by restlessness, pain of the head, great sickness at the stomach, and bilious vomiting. The pulse is generally quick, the tongue dry, and there is a remarkable depression of spirits and loss of strength. A great pain is usually felt in the back, hips, and region of the womb; a sudden change in the quantity and quality of the customary discharges also takes place; and the patient is frequently troubled with a *tenesmus*, or constant inclination to go to stool. The urine, which is very high coloured, is discharged in small quantity, and generally with pain. The belly sometimes swells to a considerable bulk, and becomes susceptible to pain from the slightest touch. When the fever has continued for a few days, the symptoms of inflammation usually subside; and at this period, if not sooner, a bilious looseness, of an obstinate and dangerous nature, comes on, and accompanies the disease through all its future progress.

There is not any disease that requires to be treated with more skill and attention than this; consequently the best assistance ought always to be obtained as soon as possible. In women of plethoric constitutions, bleeding will generally be proper at the beginning; it ought, however, to be used with caution, and not to be repeated unless where the signs of inflammation rise high; in which case it will also be necessary, to apply a blistering plaster to the region of the womb.

During the cold fit, proper means should be used to abate its violence and shorten its duration. For this purpose the patient may drink warm liquors, and, if low, may take now and then a cup of wine whey; warm ap-



plications to the extremities, such as heated bricks, bottles or bladders filled with warm water, may also be used with advantage.

Emollient clysters of milk and water, or of chicken water, ought to be frequently administered through the course of the disease. These prove beneficial by promoting a discharge from the intestines, and also by acting as a kindly fomentation to the womb and parts adjacent. Great care, however, is requisite in giving them, on account of the tenderness of the parts at this time. It is generally found necessary, early in this disease, to administer a dose of calomel, which in a few hours may be worked off with some castor oil.

If the stools should prove so frequent as to weaken and exhaust the patient, a starch clyster, with sixty or eighty drops of laudanum in it, may be administered as occasion shall require; and the drink may be rice water, in every pint of which, half an ounce of gum arabic has been dissolved.

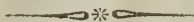
Though in general the food ought to be light, and the drink mild and cooling, yet when the disease has been long protracted, and the patient is greatly exhausted by evacuations, it will be necessary to support her with nourishing diet, and generous cordials.

When the stomach will not bear any kind of nourishment, the patient may be supported, for some time, by clysters of beef-tea, or chicken-water.

To avoid this fever, every woman, in child-bed, ought to be kept perfectly easy; her food should be light and simple, and her bed chamber cool, and properly ventilated. There is not any thing more hurtful to a woman in this situation, than being kept too warm. The bandage usually applied round the body should not be too tight, neither should the patient rise too soon from bed after delivery. Catching cold is also to be avoided; and a proper attention should be paid to cleanliness.

To prevent the milk fever, the breasts ought frequently to be drawn; and if they are filled previous to the onset of a fever, they should, upon its first appearance, be drawn, to prevent the milk from becoming acrid, and being absorbed in this state. Costiveness is likewise to

be prevented; this will be best effected by the use of mild clysters, a laxative diet, or a little castor oil, occasionally, if necessary.



## DISEASES OF CHILDREN.



MISERABLE indeed, says Dr. Buchan, is the lot of man in a state of infancy. He comes into the world more helpless than any other animal, and stands much longer in need of the protection and care of his parents; but this care is not always bestowed upon him, and when it is, he often suffers as much from improper management as he would have done from neglect. Hence the officious care of parents, nurses, and midwives, becomes one of the most fruitful sources of the disorders of infants.

The health of the infant often depends, also, very much on the conduct of the mother during pregnancy. On this subject we quote a few observations from a recent work,\* on the diseases of children, by the celebrated William P. Dewees, M. D. Professor of Midwifery in Philadelphia.

“Towards the latter end of the pregnant state, there is, we believe, in all women, an inclination to repose, or rather perhaps an aversion from exercise; this arises, in most instances, from the inconveniencies which are experienced from locomotion, owing to the increased weight of the womb and its contents, and the constant exertion necessary to preserve the centre of gravity. Hence we

\* This work of Dr. Dewees would be very interesting and useful to every intelligent head of a family.

find women who have borne several children, experience oftentimes much difficulty of preserving their centre, owing to the advance of the womb, especially after the seventh month. Hence the disposition to a recumbent posture, as they find themselves more comfortable in that position, and hence the impropriety of interfering with this instinct. Besides a long experience is in favour of our position; we have a hundred times seen pains of labour prematurely excited by over exercise near the end of pregnancy."

And in another place, "But let not the mother believe she completely discharges her duty, or that she gives the best possible chance to her offspring, by merely escaping from a miscarriage; in this opinion she would certainly not be supported by either facts or reasoning; for it is well known to those who are best acquainted with the subject, that the proper circulation and nutrition of the unborn infant may, by the improper or heedless conduct of the mother, be impaired, though the foetus itself may not be destroyed. How many instances can almost every mother call to mind, of offspring which are born feeble and emaciated, and continue to be so, or with difficulty recover; when the cause may be traced to some impropriety of conduct on the part of the parent, or to some accident during the period of pregnancy, which might have been prevented."

Again—"No truth connected with the practice of midwifery is better established than that which declares, as a general rule, that the preparative stages of labour, properly so called, should never be interfered with, by any attempt to hasten or retard their natural march. When this has been attempted, the effects have ever been mischievous."

It must be obvious to every attentive person, that the first diseases of children arise chiefly from their bowels. Nor is this in the least to be wondered at, as they are too often in a manner poisoned with indigestible drugs and improper diet as soon as they come into the world.—Every thing that the stomach cannot digest may be considered as a poison; and unless it can be thrown up, or voided by stool, it must occasion sickness, gripes, spas-

modic affections of the bowels, or what the good women call inward fits, and at last convulsions and death.

When these symptoms arise from something that irritates the intestines, the proper method of cure is to expel it as soon as possible. The most safe and effectual way of doing this is by gentle vomits. Five or six grains of the powder of ipecacuanha may be mixed in two table spoonful of water, and sweetened with a little sugar. A tea spoonful of this may be given to the infant every quarter of an hour, till it operates; or, what will more certainly answer the purpose, a grain of emetic tartar may be dissolved in three ounces of water, sweetened with a little syrup, and given as above. Those who are unwilling to use the emetic tartar, may give six or seven drops of the antimonial wine in a tea spoonful of water.

These medicines will not only cleanse the stomach, but will generally likewise open the body. Should this however not happen, and if the child be costive, some gentle purge will be necessary; for this purpose, some manna may be dissolved in boiling water, and given in small quantities till it operates; or what will answer the purpose rather better, a few grains of calcined magnesia may be mixed in a little sweetened milk and water, and administered till it has the desired effect. If these medicines be properly used, and the child's belly and limbs are frequently rubbed with a warm hand before the fire, they will seldom fail to relieve those affections of the bowels from which infants suffer so much, and often in consequence of being fed improperly.

These general directions include most of what can be done for relieving the internal disorders of very young children. Indeed, evacuating articles of one kind or other, constitute a principal part of the medicine of infants, and will seldom, if administered with prudence, in any of their diseases, fail to give relief.



## OF THE MECONIUM.

The stomach and bowels of a new born infant are filled with a blackish coloured matter of the consistence of syrup, commonly called the *meconium*. This is generally passed soon after birth, by the mere effort of nature, in which case it is not necessary to give the infant any kind of medicine. But if it should be retained, or not sufficiently carried off, a little molasses and water, manna, or calcined magnesia, may be given as already directed; or, if these should not be at hand, a common spoonful of whey, sweetened with a little honey, or raw sugar, will answer the purpose.

The most proper medicine for expelling the meconium is the mother's milk, which is always at first of a purgative quality. Were children allowed to suck as soon as they shew an inclination for the breast, they would seldom have occasion for medicines to discharge the meconium; but even where this is not allowed, they ought never to have large doses of unnecessarily severe articles forced down their throats.

To derive benefit from the mother's milk, in removing the meconium from the bowels, the child must be put to the breast soon after delivery, for if the regular secretion of milk becomes once established, its cathartic effect ceases.

## THE APTHÆ, OR THRUSH.

Apthæ are little whitish ulcers affecting the inside of the mouth, tongue, and stomach of infants. Sometimes they reach, it is supposed, through the whole intestinal canal; in which case they are very dangerous, and often put an end to the infant's life.

If the apthæ are of a pale colour, pellucid, few in number, soft, superficial, and fall easily off, they are not dangerous; but if opaque, yellow, brown, black, thick, or running together, they ought to be dreaded. It is generally thought that they owe their origin to acidity.

The most proper medicines for apthæ are mild emetics, such as have already been recommended, and gentle laxatives. Five grains of rhubarb and half a dram of calcined magnesia may be rubbed together, and divided into six doses, one of which may be given to the infant every four or five hours till they operate. These powders may be repeated as often as is found necessary, to keep the body open.

Many things have been recommended for gargling the mouth and throat in this disease; but it is not easy to apply these in very young children; we would therefore recommend to the nurse to cleanse the child's mouth frequently with a little borax and honey, or with the following mixture: Take fine honey an ounce, borax a dram, burnt alum half a dram, rose water two drams; mix them together. This may be applied gently, by means of a bit of soft rag tied to the end of a probe.

Puny children, whose mothers are weakly, and do not afford a sufficiency of nutritive milk, appear to be most liable to this disease; also those who are fed much on pap, which is sweetened with molasses or brown sugar.

The discharges from the bowels in this complaint are often acrid and watery, and after it has continued for some time, if great attention be not paid to cleanliness, there is much irritation about the fundament. We have often found small doses of calcined magnesia, frequently repeated, to correct acidity in the intestinal canal, more successfully than any other medicine, adding, where there was much looseness, a small quantity of laudanum, proportioned to the age and condition of the child.

Dr. Dewees recommends very strongly equal parts of borax and loaf sugar, rubbed together until very fine; a small quantity of this in its dry form to be thrown into the mouth, and to be repeated every two or three hours. This mixture is quickly dissolved by the saliva of the child, and is soon carried over the whole of the mouth.

The child during this complaint should be confined as much as can be to breast milk, and fed as little as possible.

There is one rule of the utmost importance to be observed in every case where an infant cannot obtain a

sufficiency of breast milk; and however simple it may appear, it is strongly insisted upon by all experienced and scientific medical men. When a real deficiency in the quantity or quality of breast milk exists, the young child should receive that nourishment, and that only, which most nearly resembles its natural food. This is to be obtained in preference to any other simple preparation, by mixing equal quantities of good new cow's milk and water, standing the same on the embers till it simmers, but not until it boils, and then sweetening it moderately with loaf sugar.

### ACIDITY IN THE STOMACH AND BOWELS.

The food of children readily turns sour on the stomach, especially if the body be any way disordered; indeed most diseases of children are accompanied with evident signs of acidity, such as green stools, griping, &c. These appearances have induced many to believe that all the diseases of children were owing to an acid abounding in the stomach and bowels; but these symptoms of acidity are much oftener the effects than the causes of diseases.

It is advisable that this be kept constantly in mind; for by a mistaken mode of practice, viewing the effect as the cause, temporary relief, it is true, may be obtained from the use of antacids, calcined magnesia, prepared chalk, and the like, while the fountain, as it were, of the disease, remains untouched. Small doses of calcined magnesia, or prepared chalk and rhubarb, with emollient clysters, and afterwards a little peppermint water, are certainly useful in relieving present pain and distress; a little brandy rubbed on the belly with a warm hand is also good: but it is generally necessary to look further in order to eradicate the complaint, which is mostly owing to some impropriety in the diet, some injurious quality of the mother's milk, or mismanagement in nursing.

We have noticed sour gripings to be most common in very hot and close weather among children in confined situations, where sufficient attention was not paid to

cleanliness; and the disease is often present with children that have been weakly and puny from birth.

Besides using the antacids which have been directed, and endeavouring to remove from the child the causes of acidity and griping, a tonic plan is recommended; but nothing will be found so bracing to the child's stomach as a suitable supply of wholesome breast milk; a pure and wholesome air will certainly be advantageous.

### OF GALLING AND EXCORIATION.

These are often very troublesome to children, especially in hot weather. They happen chiefly about the groins, and wrinkles of the neck, under the arms, behind and on the ears, and in other parts that are moistened by sweat or urine, or fretted and irritated by the dress or by dirt.

As these complaints are in a great measure owing to want of cleanliness, the most effectual mode of preventing them is to wash the parts frequently with water of a comfortable temperature, to change the linen often, and to keep the child in all respects perfectly clean. When the parts, through neglect, or from some unavoidable cause, become sore, they should be washed with water of the temperature above directed, in which is dissolved a small portion of castile soap, (not common brown soap, which is entirely too irritating,) then tenderly and carefully dried and sprinkled with a little hair powder or starch (in which there is no blue) finely pulverized.

When the parts affected are very sore, and tend to a real ulceration, in addition to the above mode of treatment, they may be washed twice or three times a day with lead water—fifteen grains of sugar of lead to a half pint of water. Six or eight grains of white vitriol to a half pint of water is, in obstinate cases, an excellent application twice or three times a day. In recapitulation, we again state, that cleanliness is the main preventive, and in many instances it will of itself effect a cure.



## THE VOMITING OF CHILDREN.

From the delicate state of children, and the great sensibility of their organs, a vomiting or looseness may be induced by any thing that irritates the nerves of the stomach or intestines. Hence these disorders are much more common in childhood, than in the more advanced periods of life. They are seldom, however, dangerous, and ought never to be considered as diseases, unless when they are violent, or continue so long as to exhaust the strength of the patient.

Vomiting may be excited by an over-quantity of food; by food that is of such a nature as to irritate the nerves of the stomach too much; or by the sensibility of the nerves being so much increased as to render them unable to bear the stimulus even of the mildest aliment.

When vomiting is occasioned by too much food, it ought to be promoted, as the cure will depend upon cleansing the stomach. This may be done either by a few grains of ipecacuanha, or a weak solution of emetic tartar, as mentioned before.

When vomiting proceeds from an increased degree of sensibility, or too great an irritability of the nerves of the stomach, such medicines as have a tendency to brace and strengthen that organ, and to abate its sensibility, must be used. The first of these intentions may be answered by a slight infusion of the Peruvian bark, with the addition of a little rhubarb and orange-peel; and the second by the saline draughts, to which a little laudanum may be occasionally added.

In obstinate vomitings, the operation of internal medicines, may be assisted by aromatic fomentations made with brandy, applied to the pit of the stomach.

## OF THE TONGUE TYE.

OCCASIONALLY, the tongue of a child is bound down to the lower jaw by a transparent membrane, which appears

to be a continuation of the bridle to the tongue; and sometimes this extends to its very tip, in consequence of which, the child cannot lift up the tongue, or push it out of the mouth, and sucks with difficulty, and imperfectly, not being able to drain, completely, the nipple. This mal-formation is easily remedied, and without the least danger, by carefully dividing the membrane with a sharp lancet, or a pair of good scissors—scarcely a drop of blood will be discharged;—of course, it is necessary to avoid cutting so far as that part which is not transparent, and is considerably intersected with blood vessels.—Should even a few drops of blood appear, the application of a little table salt, or some dry lint, held for a short time on the place will stop it.

### THE COLIC OF CHILDREN.

Young children are very liable to colicky pains in the bowels, which are mostly owing to some defect in the quality of the mother's milk, or other nourishment taken. This disease sometimes goes off with a spell of screaming, and considerable discharges of wind; but most generally, unless proper means be used, returns in a short time, and not unfrequently periodically. The belly, in this complaint, is swelled and hard, and the passages from the bowels are mostly ill digested;—children of feeble constitutions are especially liable to its attacks.

The food in this painful and distressing affection of the bowels, should be breast milk, or at most, milk, water, and loaf sugar, prepared as formerly directed. If there is evidence of acidity in the stools, small doses of magnesia should be given three or four times a day. Professor Dewees recommends, as well calculated to afford relief in the paroxysms, the following prescription: take calcined magnesia, one scruple; tincture of asafœtida, nine drops; laudanum, twenty drops; water, one ounce; of this, twenty drops is to be given when the child is in pain, and if relief is not obtained in half an hour, ten more are to be administered. This dose is calculated for a child of from two weeks to a month old; as the

child advances in age, the proportion of the ingredients should be a little increased. A tea spoonful of sweet oil, three or four times a day is often very useful.

## WATER IN THE HEAD.

THOUGH water in the head, or a dropsy of the brain, may affect adults as well as children, yet, as the latter are more peculiarly liable to it, we thought that it would be most proper to place it among the diseases of infants.

CAUSES.—A dropsy of the brain may proceed from injuries done to the brain itself by falls, blows, or the like; it may also proceed from an original laxity or weakness of the brain; from scirrhus tumours or excrescences within the skull; a diminished secretion of urine; a sudden check of the perspiration; and lastly, from tedious and lingering diseases, which waste and consume the patient. Very frequently, however, the causes of this formidable disease are involved in inextricable mystery.

SYMPTOMS.—This disease has at first the appearance of a slow fever; the patient complains of a pain in the head or over the eyes; shuns the light; is sick, and sometimes vomits; the pulse is irregular and generally low. Though the patient seems heavy and dull, yet he does not sleep; he is sometimes delirious, and frequently sees objects double. Towards the end of this commonly fatal disease, the pulse becomes more frequent, the pupils are generally dilated, the cheeks flushed, the patient becomes comatose, and convulsions follow.

MODE OF TREATMENT.—The medicines generally used are, purges of jalap, with calomel; and blistering plasters applied to the neck or back part of the head. To which we would beg leave to add diuretics, or medicines which promote the secretion of urine, such as are recommended in the common dropsy.

One reason why this disease is not often cured, may be, that it is seldom known until too far advanced to

admit of remedies. "Did parents watch the first symptoms, and call a physician in due time, I am inclined to think," says Dr. Buchan, "that much might be done."

Whenever a parent has reason to suspect in a child, an incipient dropsy of the brain, we would advise that the best possible medical assistance be immediately obtained. A skilful physician may do much; yet, in this disease, particularly, it is necessary that he should see the patient, and watch its progress.

## OF CONVULSIONS.

THOUGH many children die in convulsions, yet these are for the most part only a symptom of some other malady. Whatever greatly irritates or stimulates the nerves, may occasion convulsions. Infants whose nerves are easily affected, are often thrown into convulsions by any thing that irritates the alimentary canal; likewise by teething; tight clothes; by the approach of the small-pox, measles, or other eruptive diseases.

When convulsions proceed from an irritation of the stomach or bowels, whatever clears them of their acrid contents, or renders these mild and inoffensive, will generally perform a cure: wherefore, if the child be costive, the best way will be to begin with a clyster, and afterwards to give a gentle purge, which may be repeated occasionally.

Convulsions which precede the eruption of the small-pox or measles, generally go off upon these making their appearance. The principal danger in this case arises from the fears and apprehensions of those who have the care of the patient.

When convulsion fits arise from difficulty in cutting teeth, besides gentle evacuations, we would recommend assisting nature in the process, by cutting the gums.

When a child is seized with convulsions, without having any complaint in the bowels, or symptoms of teething; or without any rash or other cutaneous eruption having been suddenly dried up, we have reason to conclude that it is a primary disease, and proceeds immediately from the



brain. Cases of this kind, however, happen but seldom. When the disease proceeds from an original fault in the formation or structure of the brain itself, we cannot expect that it should yield to medicine. But as this is not always the cause, even with convulsions which proceed immediately from the brain, attempts should be made to remove them. The chief intention to be pursued for this purpose, is to make some derivation from the head, by blistering, purging, and the like. Issues or setons may sometimes be put in the neck, or between the shoulders.

## OF THE RICKETS.

THIS disease is most common in the large manufacturing towns of Europe, where the inhabitants follow sedentary employments, and neglect, or are unable to take proper exercise themselves, or to give it to their children. It is comparatively, as yet, but little known in the United States, especially in this western section of the country.

**CAUSES.**—One cause of rickets is diseased parents. Mothers of a weak, relaxed habit, who neglect exercise, and live upon weak watery diet, can neither be expected to bring forth strong and healthy children, or to be able to nurse them after they are brought forth. Accordingly we find, that the children of such women often die of the rickets, the scrophula, consumptions, or such diseases. Children begotten by men in the decline of life, who are subject to the gout, the gravel, or other chronic diseases, or who have been often afflicted with the venereal disease in their youth are, likewise, liable to the rickets.

Any disorder that weakens the constitution, or relaxes the general habits of children: such as the small-pox, measles, teething, the whooping cough, &c. disposes them to this disease. It may likewise be occasioned by improper diet.

Bad nursing is another cause of this disease. When the nurse is either diseased, or has not enough of milk to nourish the child, it cannot thrive. But children suffer

oftener by want of care in nurses than want of food. Allowing an infant to lie or sit too much, or not keeping it thoroughly clean in its clothes, has very pernicious effects.

**SYMPTOMS.**—At the beginning of this disease the child's flesh grows soft and flabby; its strength is diminished; it loses its wonted cheerfulness, looks more grave and composed than is natural for its age, and does not like to be moved. The head and belly become too large in proportion to the other parts; the face appears full, and the complexion florid. Afterwards the bones begin to be affected, especially in the more soft and spongy parts. The wrists and ankles become thicker than usual; the spine or back-bone puts on an unnatural shape; the breast is likewise often deformed; and the bones of the arms and legs grow crooked. All these symptoms vary according to the violence of the disease. The pulse is generally quick, but feeble; the appetite and digestion for the most part bad; the teeth come slowly and with difficulty, and they often rot and fall out afterwards. **Rickety** children generally have great acuteness of mind, and an understanding above their years.

**MODE OF TREATMENT.**—This must depend in a great measure on the discretion of those who have the care of the child, for much more can be done in this complaint by the nurse than by the physician, especially in the cases of young children.

Where the patient is of a gross habit, moderate purges, frequently repeated, are beneficial; but those means which brace and strengthen the system are, generally, most useful. A pure dry air, good nourishment, suited to the age, and the cold bath in the summer season, with tonics and diffusible stimulants, such as Peruvian bark, and claret or port wine, when the patient can be brought to take them, and at a somewhat advanced age, the preparations of iron and the mineral acids, constitute the remedial means generally directed. Sometimes issues have been found useful.

The cold bath should not be resorted to without cau-

tion, and accustoming the child, gradually, to a lower temperature of the water. The morning is the best time for its use. Many other medicines have been recommended for the rickets, but in fine we recommend a proper regimen as chiefly to be depended on.

## OF CUTANEOUS ERUPTIONS.

YOUNG children are frequently troubled with eruptions, these are seldom dangerous in themselves, although mischief is often done when they have been of considerable standing, by drying them up suddenly, without using proper precautionary measures—different preparations of lead are often disguised in quack medicines, and used for this purpose.

Neglect of cleanliness appears to be a common cause of eruptive disorders. The children of those who despise attention to this *virtue*, are often found to swarm with vermin, and generally labour under some eruptive disease.

When eruptions are the effect of improper food, or want of cleanliness, a proper attention to these alone, will often be sufficient to remove them. If this should not be the case, sulphur, prudently used, is often found successful. A little flour of sulphur may be mixed with fresh butter, or hogs lard, and the parts affected touched with it morning and night. But when this plan of treatment is adopted, the bowels ought at the same time to be kept freely open, and exposure to cold, especially cold and wet combined, should be carefully avoided.

## OF THE SCALD HEAD.

THE scabbed head, or scurfy head, frequently attacks children when very young, and is often difficult to cure. Children are sometimes, also, seized with internal disorders soon after the scabbed head has been unadvisedly healed by the application of drying medicines, without precautionary evacuations. This scurf is dark coloured, itching, and is occasionally thrown off in large flakes—

the smell is at times very disagreeable. The skin beneath the crust is inflamed, and studded with pimples.

This disease generally originates in a want of cleanliness. The cure ought to be first attempted by cutting away the hair, and keeping the head clean by washing it with a solution of Castile soap. If this does not succeed, the head should be shaved, or the hair, by some means cut very close, and kept so; it should then be rubbed at night with sweet oil, which ought to be washed off with a solution of borax and water, using an ounce of borax to two pints of water; this should be a little warmed, and repeated every day.

Where there is inflammation beneath the scurf or scabs, Dr. Dewees recommends rubbing the parts once a day with tar ointment, (*see Dispensatory.*) having first prepared the parts by washing, &c. as directed. Some years since, we had occasion to attend several children at one time, in this disease, and succeeded in curing them speedily and effectually, by keeping the head perfectly clean and shaved, as mentioned above, and applying linen caps which were covered inside with the tar ointment. Dr. Dewees disapproves, and with great reason, of attempting a cure by simply washing, and the use of a fine toothed comb, as the comb produces irritation, and increases the disease; a brush, moderately hard, is a more proper instrument.

Children's heads should not only be kept scrupulously clean, but cool. A load of finery or unnecessarily warm caps, in hot weather especially, or in a hot room, will almost certainly cause prickly heat, or galling and excoriation.

## OF THE NETTLE RASH.

THIS affection of the skin is mostly symptomatic of some other diseased action in the system, and often occurs about the time of teething; it is almost uniformly marked by much acidity in the stomach and bowels, and appears in wheels resembling the effect produced by the sting of a nettle, which itch exceedingly; there is occasionally a



mild remittent fever, it is mostly accompanied by head-ach, sickness at the stomach, and giddiness—the fever comes on in the evening.

This disease is seldom dangerous. Calcined magnesia should be given freely as a purgative, and a milk diet should be used. The patient should not be suffered to scratch if it can be prevented, as this increases and spreads the disease. A handful of wheat or rye flour rubbed occasionally on the part, will be found to allay, measurably, the itching. In the chronic form of this complaint, Dr. Dewees recommends a persevering use of small doses of Fowler's Mineral Solution. Children of from seven to fourteen years old, may take four drops, three times daily, in sweetened water; if this affects the bowels three drops may be used. In strong constitutions, five drops may often be given with safety.

## OF TEETHING.

Although we do not consider teething in itself absolutely as a disease, yet the process is often accompanied by fever, and very frequently appears to be the first mover in many complaints which occasionally prove fatal.—Eruptions of various kinds are very common during the process of cutting teeth.

Dr. Arbuthnot is of opinion that above a tenth part of infants die of teething, by symptoms proceeding from the irritation of the tender nerves of the jaws occasioning inflammations, fevers, convulsions, gangrenes, &c.; but it should be borne in mind, that during infancy and childhood there are many other outlets to human life than those which originate in this cause.

Children who are very delicately brought up generally suffer most in teething, and often die of convulsive disorders.

About the sixth or seventh month the teeth commonly begin to make their appearance. The first which protrude are generally the two front ones in the lower jaw; about the seventh year there comes a new set, and about the twentieth the inner grinders, called the teeth of wisdom, show themselves.

Children, about the time of cutting their teeth, slaver much, and have generally a looseness. When teething is difficult, especially when the eye-teeth begin to make their way through the gums, the child often has startings in his sleep, tumours of the gums, griping, green stools, the thrush, fever, difficult breathing, and convulsions.

Difficult teething requires nearly the same treatment as an inflammatory disease. If the body be bound, it must be opened either by emollient clysters, or gentle purgatives, as manna, calcined magnesia, rhubarb, senna, or the like. The food should be light and in small quantity; the drink plentiful, but weak and diluting, as an infusion of balm, to which about a third or fourth part of milk may be added. Dr. Dewees recommends a plentiful use of molasses.

Sydenham says, that in fevers occasioned by teething, he never found any remedy so effectual as two, three, or four drops of spirits of hartshorn in a spoonful of simple water, or other convenient vehicle, given every four hours. The number of doses may be four, five, or six, daily. I have often, says Dr. Buchan, prescribed this medicine with success, but always found a larger dose necessary. It may be given from five drops to fifteen or twenty, according to the age of the child, and when costiveness does not forbid it, three or four drops of laudanum may be added to each dose.

Several things have been recommended for rubbing the gums, as oils, mucilages, &c. but from these much is not to be expected. If any thing of this kind is to be used, we would recommend a little fine honey, which may be rubbed on with the finger three or four times a day.

Children are generally at this time disposed to chew whatever they get into their hands. For this reason they ought never to be without something that will yield a little to the pressure of their gums, as a crust of bread, a wax candle, a bit of liquorice root, or the like.

When on examining the mouth, the gums are found swelled and inflamed, the irritating tooth should be set free by an incision into the gum, especially where the child's general system appears to sympathise much with the local irritation. In addition to cutting the gums,

when the mouth is dry and the bowels rather costive, the child should be briskly purged.

In cutting the gum, which is a very simple operation, it is necessary that the gum lancet, or whatever sharp instrument is used, should reach to the crown of the tooth; the alteration in the appearance, especially the colour of the gum, together with examination by feeling, will plainly point out the proper time for the incision. The operation affords very little, and often no pain.

### OF WEANING.

While engaged in considering the most common diseases of children, we think it in this place proper to insert a few remarks on the subject of weaning. At the first glance it may appear improper to offer here matter which has no immediate relation to disease; but the weaning of children has a strong indirect bearing upon many of their complaints.

The propriety of putting a child to the breast as soon as possible has been already explained, and indeed it is strange to conceive why the first articles given to a child should be drugs. This, as Dr. Buchan seriously observes, is beginning with medicine by times, and no wonder if they often end with it. Children are seldom long after the birth without having passages both by stool and urine, though these evacuations may be wanting for some time without danger.

If the mother or nurse has a sufficiency of milk, the child will need little or no food before the fourth or fifth months, and then the milk, water, and loaf sugar, prepared as formerly directed by simmering, and without boiling, will be generally sufficient: this, and a little weak broth with bread in it, will ease the mother, and accustom the child by degrees to take food.

All sudden transitions are to be avoided in nursing; the food of children ought not only to be simple, but to resemble as nearly as possible the properties of milk. It is soon enough, as a general rule, to allow children animal food when they have got teeth to chew it. Children

may continue at the breast as long as the milk is good and wholesome; neither does the mother's becoming again pregnant always injure its quality. But with regard to the period of weaning, which should be effected gradually, much depends on the health of the mother or nurse, and of the child. It is not advisable, however, to wean children within the year, or in very hot or very cold weather; even near the approach of midsummer is an improper time, as children that have recently left the breast are, during the hot season, liable to bowel complaints, especially that most formidable one, the cholera infantum.

### OF DIARRHŒA, OR LOOSENESS.

By diarrhœa, we mean loose and frequent discharges from the bowels without griping; these evacuations are often, to a certain extent, salutary, and should not be suddenly checked.

A looseness is often symptomatic of some other affection; any thing that has a tendency to irritate or increase the action of the bowels is apt in children to cause a diarrhœa.

In the treatment of this disease, calomel in divided doses, say an half grain or a grain every hour in a little syrup, to a child under six months old, for four or five hours successively, is strongly recommended. We have frequently noticed its beneficial effects, especially when the complaint appeared to be a primary one. The calomel in small and divided doses will often have also an emetic effect. When the complaint is evidently symptomatic, small doses of castor oil, a tea spoonful warmed, for a young child, increasing the quantity as may be necessary, in proportion to the age and strength, is the best remedy. This should be repeated every two or three hours, until the oil is observed to pass with the stools. If there is much acidity, small and repeated doses of calcined magnesia will be found useful.

The warm bath is often beneficial, and if griping should follow the operation of the medicines, a small injection,



with a few drops of laudanum, ought to be administered.

Dr. Dewees strongly forbids animal food or juices under any form, in this disease; and recommends rennet-whey, gum arabic water, thin sage or arrow root in all complaints of the bowels, when it is necessary to feed the child.

The clothing in bowel complaints should be rather warmer than usual, and when the season permits, flannel ought to be used.

### OF CHOLERA INFANTUM.

The disease of children uniformly known by this name, is perhaps entirely peculiar to the United States. Affections of the bowels in other countries, which are in many respects similar, nevertheless differ from this endemic. It is most common in large cities, and occurs generally in the months of July, August, and part of September. It has hitherto prevailed more east than west of the Alleghany mountains, although the complaint is well known in our western cities. Philadelphia, healthy as the situation is, has, during many years, come in for her full share of distress occasioned by this malady; and the bills of mortality for Cincinnati, of July, 1826, announce thirty-two cases of the disease.

Few, if any, have had as good an opportunity of noticing this complaint in all its forms as Dr. Dewees, of Philadelphia; therefore we calculate on being indebted somewhat to an interesting article written by him on the subject, and which may be found in his treatise on the physical and medical treatment of children. To Doctor Joseph Parrish of that city also, we acknowledge ourselves under obligations.

**CAUSES.**—With regard to the causes of this disease, we agree very much with Dr. Parrish, whom we here quote.

“Excessive and continual heat is perhaps the most fruitful cause of cholera infantum. Thus we find that

the disease makes its first appearance in hot weather, increases and becomes more fatal with the rise of the thermometer, and declines with the return of cool weather in autumn. During its continuance, it may be observed to vary with every permanent change of temperature. I believe that it is by a direct operation on the system, and not by the generation of miasmata, that heat proves so deleterious to the infant. In the country where miasmata are most abundant, there is comparatively little cholera, for the heat of the sun is there moderated by the free circulation of the air, and the debilitating operation of the high temperature of the day is counteracted by the refreshing coolness of the morning and evening."

Heat, the Doctor considers, connected with confined air, to be among the most frequent causes of this complaint. We subjoin some additional remarks of his, because we consider them as very important, and are gratified in being able to adduce such respectable authority in confirmation of precisely our own views on the subject.

After speaking of the propriety of carrying children into the country during the hot weather he adds: "In the prevention of cholera, much may also be expected from a proper attention to the lodging of children. Many parents have a great dread of the night air, and exclude it from their chambers as sedulously as if it were infected with poison. But in guarding their children from taking cold, they expose them to a much greater danger. Observe their mode of treatment. The doors, and even windows, are carefully closed, the child is placed in a feather bed with its parents on each side, and almost smothered with the bed-clothes. Perhaps other children are lodged in the same apartment, and thus the delicate system of the infant is exposed to the debilitating influence of great heat and stagnant air, combined with effluvia. Simply to enter such a room in the morning is almost sufficient to sicken a healthy individual. Examine in the morning a child who has passed the night thus confined. You will find him limber as a rag, exhausted by perspiration, wholly destitute of animation, without appetite, and on the very verge of cholera. I should

recommend an entirely different plan of management.— Instead of a feather bed, the child should be placed on a hard matress, or on blankets folded and laid on the floor. The covering should be light, but comfortable; the doors and windows should be open, so that fresh air, that *food of life*, without which health cannot be sustained, may be admitted.”

Another cause of this complaint, is teething. On this subject we have already partly spoken, and here add, that it is highly necessary to attend to the state of the gums: when swelled and painful, they should be lanced freely. Sometimes where the teeth are not very far advanced, and there is much irritation of the gums, benefit may be expected from the application of blisters behind the ears.

This disease, we believe, originates principally in a debilitated state of the alimentary canal; this is strikingly evidenced by the circumstance that children that have been recently weaned, or weaned before they were a year old, are most liable to its attacks. Whatever causes produce this debility in hot weather, may be considered as predisposing to this disease.

**SYMPTOMS.**—The first symptoms which mostly strike the attention in cholera infantum, are a pale and dejected countenance, with a hollowness and bluish appearance about the eyes, a cool and clammy skin, the neck apparently shrunk, and a sharpness or pointedness of the features. Sometimes it comes on as a simple diarrhœa, or looseness; the attendant fever is generally irregular and remitting, being highest in the evening. The pulse is almost uniformly quick and feeble, although often irritable; the eyes have an unusual expression, and are often dim, with an enlargement of the pupils; the thirst is great in the progress of the disease; the head, and body especially over the stomach, are hot, while the extremities are cold.

There is a very considerable variety in the discharges from the bowels. They are white, slimy green, or very dark coloured at different times; they are most commonly offensive, sometimes exceedingly so, and at other

times have scarcely any odour. The natural contents of the bowels are often retained for a considerable time, coming away occasionally in small hard lumps, with the morbid discharges.

There is no disease which we recollect to have seen, that causes such speedy emaciation as this. Frequent puking of what is taken into the stomach, complete emaciation with stupor, with involuntary discharges, mark the last stages.

**MODE OF TREATMENT.**—As the stomach and bowels are in a debilitated and disordered state, it is necessary in the first place that they be evacuated; this may be done, according to the exigencies of the case, by emetics, purges or injections.

Dr. Dewees recommends where there is much irritability of the stomach, an injection of a gill of warm water, in which has been dissolved three tea spoonsful of common salt, for a child of a year old and upward, proportionably less for those younger, to be repeated if the sickness and vomiting does not cease, however free the discharges may be from the bowels downwards. It is certainly a matter of great consequence to be able to bring the stomach into a tranquil state; a little strong coffee without milk or sugar, is recommended as very useful for that purpose.

Calomel is generally used in this disease, and with the more propriety, as the action of the liver is very far from being natural or healthy. Some recommend giving it in common doses, so as to purge freely. We are of opinion with Dr. Dewees, that small and repeated doses are more useful. He recommends to take three grains of calomel, six grains of white sugar, to rub them well together, then divide into twelve powders, and to throw one of them dry into the child's mouth every hour, until the bowels are decidedly operated on by them. After the bowels are well evacuated, and the child is in pain or exhausted, he advises an injection in the evening with laudanum, proportionate to the age of the child, renewing the same mode of treatment the next day.

Bleeding in the early stage of this disease is often



useful, and also blisters to the extremities, when there appears a want of action in the parts. As in all diseases of the stomach and bowels, it is important to keep up an action on the skin, to produce this effect the warm bath in cholera infantum is often eminently useful. Sometimes castor oil, given in doses proportioned to the age and strength of the child, is found to evacuate the stomach and bowels; the addition of a small quantity of laudanum to this may sometimes prove advantageous.

Where there is much evidence of acidity, small doses of calcined magnesia, scarcely sufficient to move the bowels, are proper. When the discharges are not only sour, but very frequent, thin, and attended with some griping, after the proper evacuations have been premised, the following prescription will be found useful. Take of prepared chalk two drams, loaf sugar one dram and a half, gum arabic a dram, laudanum twelve drops, water four ounces—to this a drop of the oil of cinnamon may be added. The dose should be small, say a tea spoonful, and repeated every half hour or hour, according to circumstances.

Lime water in this case is often useful. Wherever the disease assumes the character of a diarrhœa, or any other complaint, it must be treated accordingly. Often, when it can be taken, a strong infusion of columbo, or Peruvian bark is useful: a strong tea, made of the Dewberry root we have frequently known useful in the dysenteries of grown people; it is by many supposed to be beneficial in this disease. We have never tried it in cholera infantum, and therefore can give no opinion. A flannel bandage to support the belly is useful.

The diet in this complaint is an object of great importance; it should be light and easy of digestion; breast milk, or that kind of nourishment which is nearest to it, should be preferred. Milk and water sweetened, rice water and milk, preparations from arrow root, sago, &c. may be allowed, and, by degrees, more generous nourishment, if it is found to agree with the stomach and bowels.

As in this disease there is often, perhaps we may say always, a very unequal degree of excitement in different

parts of the system, blisters are peculiarly useful to rouse up those parts in which the powers of life seem weak and inactive.

Unfortunately, however, notwithstanding all that can be done, this complaint too often proves fatal; and here again, using the words of Doctor Parrish, "This mortality is less owing to our ignorance of the nature of the complaint and the proper mode of treatment, than to the continued operation of the causes by which it is produced. We may obviate the more violent symptoms; we may procure temporary relief; we may even flatter ourselves that a cure has been effected; but the original causes have not lost their power; an increased susceptibility to their operation remains; relapse upon relapse is experienced; and at last, the little sufferer, worn out by repeated attacks, expires."

A removal into the country is the best remedy with which we are acquainted. Dr. Rush used to state that he never had lost but three patients where this advantage was properly commanded. Dr. Dewees, (as well as Drs. Rush and Parrish,) recommends it also as a preventive, but advises that the change be not made too early in the season.

We would advise fine flannel garments in preference to linen, for children liable to this disease, as well as during its progress; and if there be any addition made to the use of breast milk and farinaceous diet already spoken of, would suggest that the child should occasionally, in order to invigorate the stomach, be permitted to suck at a piece of well cured salt meat, or have given to it a little well seasoned beef tea, or the like. Fruits, &c. are absolutely improper.

## OF WORMS.

WHETHER worms are by some unknown process originally generated within the stomach and intestinal canal, or whether their rudiments are received from without, in the food and drink, we have not room here to investigate. We however incline to the latter opinion.

and believe that the difference of their forms and habits, from any thing that we observe elsewhere; may depend upon the principle of life in them being developed under peculiar circumstances of location and nutriment.

“As a general rule,” says Dr. Dewees, “we believe it entitled to confidence, that children altogether confined to their mother’s milk, never have worms. This, to be sure, is contradicted by M. de Lille, who affirms that worms were expelled from his daughter, who was only eleven months old, and who was altogether confined to the breast. As regards our own testimony, we declare never to have seen worms in children under ten months old, and only in two instances of that age; both of these children were weaned at four months.”

Children who are allowed to eat indigestible substances, such as unripe fruit, &c. are most liable to worms; also those in whom the digestive faculty is weak and imperfect. Many kinds of worms have been found in the human body; some are found mostly in the small intestines; some in the stomach, others in the larger portions of the intestines, and just within the fundament. There is no doubt but that different kinds of worms occasionally exist in this convoluted canal, that are yet unknown or undescribed.

We will endeavour here to notice the three species that are most common. The *lumbricoides* or *long and round worm*, which bears a considerable resemblance in shape to the common earth worm, is generally about the thickness of a goose quill, perfectly round, and from three to twelve inches in length; they are commonly found in the small intestines, but sometimes in the stomach.

The second kind, or *ascarides*, are round, slender, and from a fourth of an inch to an inch in length. These are very active and lively; they are found in the large intestines, but mostly just within the fundament, where they cause, sometimes, an intolerable itching.

The *tania* or *tape worm*, is flat, long, and formed of articulations; these articulations or links, are capable of becoming distinct worms, when left in the alimentary canal. This worm grows sometimes to the length of fifty or sixty feet.

**SYMPTOMS.**—So far from being able to ascertain the exact description of worms which infest the body, physicians, we believe, pretty generally agree that there are no unequivocal signs of the presence of internal worms, except their being actually discharged from the stomach or bowels; yet, certain symptoms in the patient enable us, generally, to judge with tolerable accuracy with regard to their existence. These are starting, a grinding of the teeth in sleep, swelling of the upper lip and lower part of the nose; a pale and cadaverous countenance, with occasional flushings; the appetite sometimes bad, at other times voracious; an unpleasant breath; a hard, swelled belly, an involuntary discharge of spittle when asleep; swoonings; epileptic fits, with many other unaccountable nervous symptoms which were formerly ascribed to witchcraft; a considerable dilation of the pupils of the eyes; a dry and spasmodic cough; sleep broken off by fright and screaming.

The symptoms of tape worm, which is the most dangerous are generally somewhat peculiar, such as a burning motion, as of something alive in the bowels.

\*“Occasional stickings, or rather bitings, are felt in the region of the stomach; the abdomen swells at intervals, and then subsides almost by undulation; a sense of cold from time to time pervades the abdominal viscera; the appetite is usually uncommonly great; the complexion is livid, and the patient is frequently faint; the pupils are unusually dilated; giddiness confuses the head, and excites vomiting; the legs vacillate, and sometimes the whole body seems to be affected with convulsive trembling. Often small substances, resembling the seeds of the lemon or gourd, are evacuated with the fœces, which are portions of these worms.”

We have already spoken of the itching which mostly denotes *ascarides*. The long and round worms, or the *lumbricoides*, are generally evidenced by a pricking sensation in the belly, and colicky pains. This worm is

\* We insert this interesting quotation from Eberle's *Materia Medica*; it is marked there as quoted, and we believe from Brera's *Treatise on Verminous Diseases*.



supposed capable, in some cases, of perforating the intestines.

**MODE OF TREATMENT.**—We have enumerated the symptoms with care, and it might appear to the inexperienced, easy to form an opinion of them when they are present in a patient; but here we quote Dr. Dewees, as an apology for the difficulties under which we must necessarily labour in giving particular directions for practice. He says, “so general and so uniform for the most part are the symptoms, arising from almost any irritation of the bowels, that one cause may readily be mistaken for another; thus we have frequently seen all the symptoms usually attendant upon worms, completely simulated by the presence of acrid bile and the reverse.”

In relation to the removal of worms, the same remark, or perhaps rather idea, may well apply, which we used on a former occasion; where there are an immense number of avowedly *certain cures* offered to the public for any disease, people may rest satisfied that the disease is complicated, intricate, and but imperfectly understood. Here it is that *those vultures, the Quacks, gather*, with their lozenges, worm cakes, and various other nostrums.

By careful observation, however, and a prudent administration of *known and tried medicines*, these vermin may be mostly dislodged with safety to the patient.

The pink root is perhaps the most effectual remedy known for the long and round worm. It was first introduced into practice by some of the most eminent physicians in South Carolina, and is now in very general use. This article, it will be well to remember, loses much of its virtue by age. When taken in excessive doses, it sometimes produces temporary unpleasant, and even alarming symptoms: such as dimness of sight; giddiness; dilatation of the pupils of the eyes, and occasionally aberration of intellect; but these appearances pass off in a short time, and it is entirely unnecessary to give it in such quantities as to produce these effects; nor is the administration of any medicine without danger, if it be used incautiously.

For children of from one year to two, two drams is a

dose; from two to five, one third of an ounce; from five to twelve, half an ounce; for a grown person, six drams; one half of these quantities to be infused in boiling coffee or water, to be taken when sufficiently cool, sweetened, with the addition of milk, morning and evening; this to be repeated for three successive days, and then the bowels should be well purged with calomel, calomel and jalap, or senna tea.

Should the pink root fail, which it seldom or never does, with the above mentioned kind of worms, a decoction of the Jerusalem oak, made by boiling a handful of the leaves in a quart of milk, for a quarter of an hour, to which orange peel may be added, ought to be given to a child of four or five years old, in doses of about a wine glassful two or three times a day; to younger or older children, in proportion. This course may be continued several days, and should be followed by some brisk purgative medicine.

For the *ascarides*, small and repeated purges of aloes, with injections of the same, seem to be the most successful mode of treatment. From five to fifteen grains of aloes may be taken by an adult: it should be administered to children in proportionate doses—injections of lime water in this case, are often very useful. A bougie or tent inserted into the rectum, covered with tar ointment, whale oil, or mercurial ointment, will mostly dislodge these intruders in a very short time.

The *tania* or *tape worm*, rarely attacks children; but we have deferred noticing its treatment until this time, as matter has necessarily crowded on us in greater quantity than was anticipated. The most usual medicines given, are spirits of turpentine, male fern, and in a word all the more active and severe articles which are used for worms. Dr. Dewees mentions a case of a lady from whom one was expelled by drinking every morning, for seven days, a pint of a very strong solution of table salt.

Dr. Eberle mentions\* a specific of Madame Nouffer, which was purchased by Louis XV of France, for the purpose of destroying this species of worm.

\* In his Treatise of the Materia Medica and Therapeutics, published in Philadelphia, in 1822.

The following are the articles and the directions for using them: "take three drams of the root of the *Filix mas*, or male fern, reduced to a powder, mixed with four or six ounces of water; the whole is to be swallowed by the patient in the morning, on an empty stomach. For children, the dose is lessened to one dram of the powder. If this produces nausea, the patient must inhale the odour of strong vinegar. Two hours after the powder is taken, the patient is to swallow the following bolus: (the dose of course, also, graduated for children:) take calomel and scammony, of each twelve grains; and five grains of gamboge—let them be finely powdered, formed into a bolus, and taken at a dose."

Brera recommends this medicine, and Herenschwand, a German physician, had employed the male fern, before this secret was known, in a way very similar.

Spirits of turpentine has acquired an established character in cases of tape worm; and when employed for this purpose, it should be given in large doses of from one to three ounces. Professor Coxe, of Philadelphia, states that it has been given to the extent of four ounces in one dose, without any perceptible bad effects, and scarcely more inconvenience than would follow from an equal quantity of gin. In large doses it is not apt to produce a difficulty and scalding in passing urine, but only an approach to intoxication; and it generally acts as a speedy purgative, and discharges the worm, in all cases, *dead*.

Powder of tin has also been recommended in doses of from a scruple to a dram. Dr. Alston assures us, in the Edinburgh essays, that it should be given in larger quantities; so, also, does Dr. J. Fothergill. Dr. Alston directs an ounce of the powder on an empty stomach, mixed with four ounces of molasses; next day half an ounce, and the day following half an ounce more, after which a cathartic.

We conclude the subject of worms with remarking that a diet of animal food and milk is generally preferable for children after the expulsion of these animals, and every thing should be done to brace up and invigorate the system, and strengthen the digestive functions.

This will be found the best mode of prevention against future attacks.

As many anomalous cases have occurred in which well known animals, such as leeches and the like, have grown to a great size in the human body, causing distressing maladies and death: grown persons should be cautious, themselves, with regard to drinking; nor should they suffer children to drink stagnant and pond water, which is likely to contain the radicles, eggs, or young of such creatures.



## OF SURGERY.



TO DESCRIBE all the operations of surgery, and point out the different diseases in which they are necessary, would extend this article far beyond the limits prescribed; we therefore confine our observations to such cases as most generally occur, and in which proper assistance is either not asked, or not always to be obtained.

Though an acquaintance with the structure of the human body is indispensably necessary to qualify a man for being an expert surgeon, yet many things may be done to save the lives of their fellow-men in emergencies by those who know nothing of anatomy. Farmers daily perform operations upon brute animals, which are not of a less difficult nature than many of those required by the human species, yet they seldom fail of success.

Every man is in some measure a surgeon whether he will or not. He feels an inclination to assist his fellow-men in distress, and accidents happen every hour which give occasion to exercise this feeling. The feelings of the heart, however, when not directed by the judgment, are apt to mislead. Thus one, by a rash attempt to save his friend, may sometimes destroy him; while another, for fear of doing amiss, stands still, and sees him expire without attempting to relieve him, even when the means are in his power. As every good man would wish to steer a course different from either of these, we propose to lay down some general principles which should actuate him in such emergencies.

## OF BLOOD-LETTING.

No OPERATION of surgery is so frequently necessary as bleeding; it ought, therefore, to be generally understood. But though practised by the most inexperienced persons, very few know when it is proper. It is an operation of great importance, and is, when seasonably and correctly performed, of singular service.

Bleeding is proper at the beginning of all inflammatory fevers, as pleurisies, inflammations of the lungs, &c. It is likewise useful in all topical inflammations: as those of the intestines, womb, bladder, stomach, kidney, throat, and eyes; as also in the asthma, coughs, head-achs, rheumatisms, the apoplexy, epilepsy, and often in dysentery. After falls, blows, bruises, or any violent hurt received either externally or internally, bleeding is necessary. But in all disorders proceeding from debility, bleeding is improper.

Bleeding for topical inflammation ought always to be performed as near the part affected as possible. When this can be done with a lancet, it is to be preferred to any other method; but where a vein cannot be found, recourse must be had to leeches or cupping.

The quantity of blood to be let, must always be regulated by the strength, age, constitution, manner of life, and other circumstances relating to the patient. It would be ridiculous to suppose that a child could bear to loose as much blood as a grown person, or that a delicate female should be bled to the same extent as a robust man.

From whatever part of the body blood is to be taken, a bandage must be applied between that part and the heart. As it is often necessary, in order to raise the vein, to make the bandage pretty tight, it will be proper in such cases, as soon as the blood begins to flow, to slacken it a little. The bandage ought to be applied at least two or three inches from the place where the orifice is intended to be made.

Persons unskilled in anatomy ought never to bleed in

a vein that lies over an artery or a tendon, if they can avoid it. The former may easily be known from its pulsation or beating, and the latter from its feeling hard or tight, like a whip-cord, under the finger.

It is a common opinion, that bleeding in the feet draws the humour downwards, and consequently cures diseases of the head, and other superior parts; this is altogether a ridiculous notion. When it is necessary to bleed in the foot or hand, as the veins are small, and the bleeding is apt to stop too soon, the part ought to be immersed in warm water, and kept there until a sufficient quantity of blood is drawn.

It is not necessary to dwell on the different parts of the body from whence blood may be let, as the arm, foot, forehead, temples, or neck. The foregoing observations will be sufficient for determining which of them is most proper upon any particular occasion. In all cases where the intention is only to lessen the general mass of blood, the arm is the most proper part in which the operation can be performed.

When blood is to be drawn from the arm, the patient being placed in a favourable situation, a bandage should be applied two or three inches above the elbow, sufficiently tight to arrest the blood in the veins; but at the same time to allow a free passage of it through the arteries. The pulsation at the wrist is here our proper director; as long as that can be felt, the circulation through the arteries is unimpeded.

If the vein does not rise well, the patient should grasp a stick, or alternately open and clench his hand firmly. The operator must then take the arm in his left hand, pressing the vein with his thumb about one or two inches below the part where he means to puncture. The lancet should then be held firmly between the thumb and fore finger of the right hand, and steadily introduced, somewhat obliquely into the vein. When a sufficient quantity of blood has been drawn, the ligature is to be removed, the edge of the orifice brought together, a compress laid over the wound, and a proper bandage applied to the arm.

If during the operation the patient becomes faint, he

should be laid in a horizontal posture, and a little cold water sprinkled in his face; this, with the free admission of cool air, will mostly remove the unpleasant feeling.

In connexion with depletion from the general system, it will be necessary to dwell, for a short time, on topical blood letting. This plan of drawing blood has been found highly efficacious in many local inflammatory affections. It may be performed in two ways—either by the application of leeches or cups. Leeches where they can be procured are mostly preferred; they can be applied to very delicate parts, as the eye-lids, gums and scrotum, where cupping cannot be resorted to. Where there is a difficulty in making them adhere, it will be necessary to smear a little milk or fresh blood over the part to which they are applied; when, if active and lively, they will commonly attach themselves to the integuments, and perform their duty aright.

As soon as they have filled themselves and drop off, the bleeding from the wounds should be encouraged by the application of cloths wrung out of warm water. But if the blood should continue to flow longer and more copiously than is desired, it will be necessary to arrest the discharge by touching the wounds with some styptic application; as a decoction of galls, a solution of alum, or the white or blue vitriol, applying afterwards a little lint, which should be bound tightly over the bleeding orifices.

That leeches may disgorge the blood taken, and be made fit for a future operation, it will be necessary to touch them with a little vinegar, instead of sprinkling them with salt, as this is apt to destroy them. As in many parts of the Western Country it is almost impossible to procure a proper supply of leeches, cupping, of necessity, is more generally resorted to.

When it becomes necessary to perform this operation, the first object is to produce an exhaustion of air over one or more portions of the skin, and for this purpose, glass cups, into which a spirit lamp having a thick wick, is momentarily introduced, may be used. In this manner the air within the cups is exhausted, so that when they



are applied to the surface of the body the pressure of the atmosphere causes them forcibly to adhere, and the skin will be observed gradually to swell up within the cups, owing to the pressure of the atmosphere on the surrounding parts, and the expansion of the fluids contained in the cellular membrane.

When the integuments under the glasses are observed to be considerably elevated above the common surface, the cups ought to be removed by gently inserting the finger nail between them and the skin, and the scarificator should be applied to the elevated surfaces; after which, the cups being exhausted as before, must be reapplied, and permitted to remain until a sufficiency of blood has been drawn to effect the desired purpose. It is unnecessary to enter more into the detail of this operation; it should be learned by example rather than precept, as pages of description would not convey so good an idea to the learner as once seeing the operation properly performed.

## OF WOUNDS.

ALL injuries are more or less dangerous, according to their positions, extent, and the manner in which they are inflicted. Much, also, depends upon the constitution and age of the patient; for while in some we find the most trifling wounds attended with dangerous consequences, we observe that by others, extensive injuries are sustained with little or no inconvenience.

Scientific writers have made nice distinctions between wounds inflicted by different kinds of instruments, and have been very careful to point out the precise mode of treating them individually. This, though useful to professional men, will not answer for the community, for whom, especially, this work is intended. All that is here practicable will be to point out some general principles, which with a little modification will apply to every variety of simple injuries. That these principles may be exhibited in as clear a light as possible, we will divide wounds into two distinct heads, viz: the incised or cut, and the lacerated or torn.

Wounds of the first class are inflicted by sharp cutting instruments, and with the exception of the copious hæmorrhage to which they are liable, are, of all others, the safest and most easily managed.

The second division, or lacerated wounds, are commonly produced by obtuse irregular bodies: as machinery in motion; cannon shot; splinters; falls on rugged projecting points of rock, and the like. These are much more tedious and difficult to manage, than the simple incised wounds.

In the treatment of incised wounds, the principal indications are to suppress the hæmorrhage, to remove foreign substances, and then to bring the edges of the cut together by sutures or adhesive strips.

To effect the first indication, viz: to suppress the hæmorrhage; where it is slight, a simple compress on the part will answer; but where the vessel injured is large, or even of a moderate size, or when the instrument inflicting the injury is very sharp, a ligature will be necessary. The mouth of the bleeding vessel being seized with the tenaculum, forceps, or needle, and drawn a little out from the surrounding parts, a ligature should be tied around it sufficiently tight, to entirely obliterate the orifice.

Ligatures are made of various substances: as thread, silk, or leather—all may be used, though those made of animal substances are certainly preferable, on account of their more speedy decomposition, and consequent removal from the vessels to which they have been applied. For this useful information we are indebted to Doctor Physick.

The ligatures should be made as perfectly round as practicable, for they will then more equally divide the internal coats of the bleeding vessel.

After the bleeding has been arrested, the next indication is to remove foreign bodies, if any are in the wound. As long as there is reason to suspect the presence of such bodies, the wound should not be permitted to heal immediately, but ought to be kept open with poultices.

In attempting to heal simple incised wounds *by the first intention*, adhesive plasters are to be preferred to any

other mode of dressing, as they are productive of little or no irritation. In some cases, where they cannot be made to adhere firmly, as in wounds of the nose, occasionally of the scalp, of the ears, lips, &c. stitches are indispensably necessary.

When the wound is extensive, a number of adhesive strips will be required to keep the parts in their proper positions. This in simple incised wounds is all that will be required, excepting lint and comfortable bandages; these should be applied in a manner suited to the formation of the injured parts.

Wounds produced by blunt substances, as already remarked, are termed lacerated.

Lacerated wounds, however extensive, for the most part bleed sparingly, even though very large arteries have been torn across. This want of power in lacerated parts to bleed is, perhaps, partly owing to the shock sustained by the surrounding nerves: hence the arteries are paralyzed, lose their contractile and propelling power, and the blood coagulates in their cavities, and in the surrounding cellular membrane. But though wounds of this description are not liable to immediate, they are to a secondary hæmorrhage, which is infinitely more dangerous; for here the attendants are thrown off their guard, and the evil comes when, perhaps, least expected. The pain in such wounds is not severe, but mortification of the part is too frequent an occurrence.

In the treatment of lacerated wounds, the first object should be to remove all foreign bodies from the part, and if hæmorrhage be present, it should be arrested. The edges of the wound are now to be drawn as closely together as possible. We cannot expect a perfect union, though the parts will sometimes adhere beyond our most sanguine expectations. If, after the parts have been drawn together, much swelling and pain arise, the dressings should be removed, and warm poultices applied, and occasionally repeated, until suppuration has been induced; after which, the parts may be again approximated by adhesive plasters. When the wound begins to heal, simple ointments on lint may be applied. As a consequence of wounds, by a continued sympathy, fever

and delirium are sometimes induced. Here the general system must be attended to, and the unfavourable symptoms subdued by bleeding, purging, and low diet. We should be careful, however, not to carry the depleting plan too far, for by thus prostrating the system, the patient will become more liable to mortification or lock jaw.

In all cases of important wounds, and indeed injuries of every description, rest and quiet are very necessary. Much mischief is often done by probing into wounds with an incautious hand. The ablest surgeons disapprove strongly of this practice. It is important, especially in deep wounds, that they heal from the bottom. If more were left to nature, and her evident intentions merely assisted by a prudent removal of obstacles, many injuries would be safely removed, which by the torturing application of a multitude of healing, drawing salves, &c. frequently either terminate in mortification, or cripple the patient for life.

When fungus or proud flesh is evident in a wound, a little burnt alum may be sprinkled on the part; this however, is mostly done more frequently than necessary.

## OF BURNS AND SCALDS.

THE number of modes in which burns and scalds have been, and are treated with, it would seem, nearly equal success, is truly astonishing. From spirits of turpentine and strong French brandy, to lead water and ice water; nearly the whole catalogue of external medical applications has been used in different cases. In slight burns which do not destroy the skin, but are nevertheless very painful, holding the part in cold water will afford immediate relief; vinegar is still better, and an excellent dressing for slight burns is lime water and linseed oil.

Doctor Buchan and others, seem to anticipate in cases of serious burns the greatest danger from inflammation, which beside causing constitutional fever, is apt to terminate in gangrene; in the prospect of this danger, bleeding, purging, and a low diet are recommended.



We have seen and attended several cases of very severe burns, and have observed to the best of present recollection, a certain degree of stupor or disposition to sleep, and insensibility, with the absence of severe pain, and a frequent but small pulse in every case. We speak now of burns which had destroyed a considerable portion of the skin. The plan pursued was an application to the parts of very fine corn meal poultices, well softened with sweet oil or lard, and the internal use of tonics and stimulants, as was found necessary to support the system, and afford a discharge of healthy pus; of course premising a sufficiency of evacuating medicine to keep the bowels open. In lieu of the poultices, after three or four days, basilicon ointment or some still more stimulating application was applied to sores which seemed in an inactive or unhealthy state. Under this plan we have always found the wounds to heal speedily. As stimulants, wine, porter, brandy, &c. were administered; the nourishment directed was light but generous.

"The question," says Dr. Thomson, in his lectures on inflammation, "most deserving the attention of medical practitioners, with regard to the use of the warm emollient poultice in burns, is whether we should apply it immediately after the burn has been received, or interpose for some hours, as has been so strongly recommended, dressings with vinegar, spirits of wine, or oil of turpentine: my own experience has not been sufficient to enable me to determine this point to my entire satisfaction; yet I think it right to state to you, that in a number of trials made at different times, I have had occasion to see burns to which common emollient poultices had been from the first applied, slough and granulate faster, and in a more kindly manner than similar burns in the same persons; to which, in some instances, oil and lime water, and in others again, oil of turpentine, were applied at the same time with the poultices."

There is no doubt, in some cases of burns and scalds, where the pulse is full and strong, accompanied with febrile action, a necessity for bleeding, and the same course of treatment as is used in other violent inflammations; but where there is a disposition to mortifi-

cation, a highly tonic and stimulant plan is necessary. (*See the article Mortification.*)

When burns are occasioned by the explosion of gunpowder, some of the grains are often forced into the skin; at first they produce irritation, and if not removed, commonly leave marks which remain during life. They should therefore be picked out as soon as possible after the accident, and the parts should be covered with emollient poultices.

Burnt parts which are contiguous, frequently grow together during the cure. The fingers, toes, eyelids, &c. are particularly liable to this occurrence, which can easily be prevented by keeping dressings constantly between these parts until a cure is effected.

Dr. Buchan remarks, "that a strong solution of soap in water, has long been in use with those employed in any business which exposes to bad scalds." Various other remedies are used in cases of these accidents, indeed it would take many pages to contain them were they all to be enumerated. We have here mentioned the most important.

## OF BRUISES.

BRUISES are often productive of worse consequences than wounds. The danger from them does not appear immediately, by which means it often happens that they are neglected.

In a slight bruise it will be sufficient to bathe the part with warm vinegar, to which a little brandy or rum may be added, and to keep cloths wet with this mixture constantly applied to it.

When a bruise is very violent, the patient ought immediately to be bled, and put upon a proper regimen. His food should be light and cool, and his drink of an opening nature. The bruised part must be bathed with vinegar and water, as directed above; and a poultice made by boiling bread, elderflowers, and chamomile flowers, in equal quantities of vinegar and water applied to it. This poultice is peculiarly proper when a wound

is joined to the bruise. It may be renewed two or three times a day.

When the structure of the vessels is totally destroyed by a violent bruise, there ensues a great loss of substance, which produces an ulcerous sore, often very difficult to cure. If a bone be much injured, the sore will not heal before an exfoliation takes place; that is, before the diseased part of the bone separates, and comes out through the wound. This is often a slow operation.

A patient in this situation is pestered with different advices. Every one who sees him proposes a new remedy, until the sore is so much irritated with various and opposite applications, that it is often at length rendered absolutely incurable. The best method of managing such sores is, to take care that the patient's constitution does not suffer by confinement or improper medicine, and to apply nothing to them besides simple ointment, or a poultice of bread and milk, with boiled chamomile flowers, or the like, to keep the parts soft and warm. Nature, thus assisted will, in time, effect a cure, by throwing off the diseased parts, after which the sore soon heals.

## ULCERS.

THESE, with propriety, may be divided into the *healthy or simple*, the *unhealthy or the irritable*, and the *indolent*. To treat extensively of the various forms of ulcers, is not our present object; we will simply lay down some of the most striking peculiarities in the appearance and treatment of them.

*Simple ulcers*, are consequent to wounds, bruises, burns, &c. and are mostly found in the young and healthy. Small red granulations rising above the surface of the ulcer, give it a lively, florid appearance. From the sore there is discharged a matter of a thick, tenacious consistency, and having the colour of rich cream. After a time, the tops of the granulations near the old skin, assume a whitish appearance, which gradually approaches the centre of the sore until the whole ulcer is covered by a cicatrix or scar.

The treatment of this form of ulcer is very simple; nature, assisted by rest, and a horizontal position is frequently sufficient for the cure. To facilitate this, however, a warm poultice may be applied, and frequently repeated, so long as its effects are beneficial; or lint, spread with the mildest ointment, will be found equally productive of benefit.

The *irritable ulcer* is not only different from the simple, in its appearance, but its cure requires a different management. The edges are ragged and appear somewhat to overhang the cavity of the sore, the bottom of which is covered by thin, greenish, and extremely acrid matter; and dark, red, spongy excrescences, exceedingly painful, and bleeding on the slightest touch, are found in the place of the healthy granulations which are seen in the *simple ulcer*.

Ulcers of this description are generally formed in persons whose digestive organs are unsound, and whose habits are irregular. The leg is the usual seat of the disease, and the patient suffers very much from pain, which is particularly severe at night. The redness and inflammation extend some distance beyond the ulcer to the surrounding parts.

The treatment of this form of unhealthy ulcer, particularly when it depends on a morbid state of the digestive organs, should be applied to the general system, as well as to the local affection. Repeated purging, and the administration of small nauseating doses of tartar emetic, continued for some time, will often produce very beneficial effects.

As ulcers of this description are often found in a very foul state, it will be necessary to commence the treatment with the application of warm poultices, which should be continued so long as the sore improves under their use. The common carrot often answers the purpose of a poultice exceedingly well. It may be either boiled and mashed very soft, or finely grated and applied to the part raw.

To subdue irritability, both general and local, opium may be given internally, and laudanum can be mixed with the poultices; or powdered opium may be sprinkled



over the surface of the ulcer before the poultices are applied. The most perfect rest should be enjoined upon the patient.

The *indolent*, or the second species of *unhealthy ulcer*, is very common among the aged, the intemperate, and females about the period when the menstrual discharge ceases. It may be known by the flat shining appearance of the surface, which is often covered with a whitish, or greenish crust, very tenacious of the part to which it adheres; sometimes there is no matter to be found on the sore, but there is generally an offensive and purulent fluid discharged. The edges of the ulcer are elevated, and rounded, and the surrounding parts, for some distance, are swelled and hardened. There is little or no pain experienced by the patient.

In *indolent* ulcers, the best application with which to commence the treatment, is the bread and milk, or fine corn meal poultice; this should be continued, washing well the ulcer with a strong decoction of oak bark, or an infusion of galls, morning and evening, until it assumes a clean appearance. Adhesive straps should then be used so as to approximate the edges of the ulcer as closely as possible. A roller bandage may then be applied, extending from the foot above the part affected.

Other stimulating articles, such as a decoction of walnut leaves, or a solution of lunar caustic may be found, at times, useful.

## OF BROKEN BONES.

WHEN any important bone is broken, it is advisable to obtain, as speedily as possible, the assistance of a skilful surgeon; sometimes, however, this is not practicable, neither will circumstances in some cases admit of delay. We have known, however, instances of bones set by persons who had never seen the operation performed, and these, their first attempts, were entirely successful.

It would be impossible here to enter into a description of the various kinds of fractures, or of fractures which occur in different parts of the body; all that we can do

will be to offer general remarks. Fractures are correctly divided into two classes, simple and compound. They are termed simple when the bone is merely broken, and compound when there is also an external wound through which one end of the broken bone occasionally protrudes; often there is a considerable bruise accompanying the fracture—this likewise requires attention. There is frequently an excitement of the pulse which calls for bleeding, as that operation has a tendency to relieve pain, besides preventing fever.

The most important part in the treatment of a fractured bone, is to replace the parts in a natural position, and to keep them thus situated; whatever means will effect this for a few weeks, until the process of uniting has considerably advanced between the broken parts, answers the main intention of surgical treatment. But there are other and important considerations besides keeping the fractured parts in a proper position; this should be done so that no injury may be sustained from the dressings or bandages; and also that the limb, (for we allude now to fractures of the limbs particularly, they being the most common,) can be wetted frequently with vinegar and water, lead water, or whatever may be needed, without loosing the bandages; and in case of a compound fracture, so as to afford an opportunity of examining the external wound. The general health is also to be held in view; fever is to be kept down; and on the other hand too great debility is to be guarded against.

Many improvements have of late years been made by surgeons in the form of splints, and in the application of bandages; these all tend to a greater simplicity than was formerly observed. Splints are made of stout pasteboard or leather for injuries of small bones, and in fractures of large bones, they are made of some soft wood, such as cedar. In fractures of the thigh, the external splint should extend from the arm pit beyond the foot; and the internal, from the upper part and inside of the thigh, below the foot; also there should, at the lower end, be mortises in each, for a cross piece, to which a handkerchief, or a bandage wrapped around the ankle and foot may be fastened for the purpose of necessary and continued extension.

After the fractured parts of bones have been reduced to their proper place, the limb should be kept steady by assistants while a *rolling bandage* (strips of muslin three or four inches wide, sewed together until of sufficient length,) is applied around the whole limb, beginning at the foot or hand, as the case may be. When about to apply this bandage, it should be rolled up smooth and fairly, in the same manner that rolls of ribbon are seen prepared in dry good stores; this renders the operation much more convenient. The bandage should be kept on for a week or ten days, and then cut off and replaced with the utmost care, so as not to disturb the situation of the injured parts.\*

The insertion of soft rags, or clean tow, in suitable places, will prevent injury of the limb from the pressure of the splints, which should be secured by another roller applied over them. The patient must, for some time, if the inferior extremity be broken, lie on his back; and should be careful not to exert the muscles of the part, lest the bones become misplaced. There is a constant tendency of the muscles to contract, which, even after the bones have been replaced, will cause a shortening of the limb and deformity, unless guarded against.

The patient should be kept as dry and clean as possible; and in fractures of the thigh or leg, a bed pan should be used to receive the natural evacuations from the body.

Where a fracture is compound, the wound should be treated with simple dressings; where there is much local inflammation, the part should be frequently moistened with a pretty strong solution of sugar of lead in water, or vinegar and water; a few grains of opium rubbed up with it is often useful.

In fractures of the scull, which may often be known by feeling with the hand, and ought always to be suspected where a serious blow has been received on the

\* A mode of bandaging the leg still less likely to disturb the fractured parts, is at present practised; but owing to its being complicated, we are under the impression that it would require a surgeon to apply it. Those who feel desirous to see it described, are referred to Gibson's Elements of Surgery.

head, the assistance of a surgeon is perhaps indispensable.

In cases of fractures generally, Dr. Buchan very justly remarks, "that persons who have been accustomed to live high, ought not of a sudden to be reduced to a low diet." This might have fatal effects.

There is often a necessity for indulging even bad habits, in some measure, where the nature of the disease might require a different mode of treatment.

We would here remark, that not only in cases of fractures, but in every disease, the physician or friend should accommodate the means used, to the constitution, previous habits, and often even foolish notions or antipathies of the patient, instead of attempting to force all these into subservience to some preconceived theory existing in his own mind.

Even *systematic and scientific medical men* have incurred ridicule and just censure for this foolish pertinacity. Instead of the physician's saying "it is not my mode of practice" to allow or forbid certain articles or modes of treatment, as the case may be; he should avow it to be, and should make it his mode of practice, to prescribe for the symptoms, taking fully and carefully into view the condition in which the patient's constitution would be independent of the immediate and existing disease.

Unfortunately, however, dictatorial Sangrado's will always be found.

## OF DISLOCATIONS.

WHEN a bone is moved out of its articulation, so as to impede its proper functions, it is said to be *luxated* or *dislocated*. As this often happens to persons in situations where no medical assistance can be obtained, by which means limbs and even lives are frequently lost, we shall point out the method of reducing the most common luxations, and those which require immediate assistance.

Any person of common sense and resolution, who is present when a dislocation happens, may often be of more service to the patient than the most expert surgeon can, after the swelling and inflammation comes on.



A recent dislocation may be reduced by extension alone, which must always be greater or less, according to the strength of the muscles which move the joint, the age, strength, and other circumstances of the patient.

When a bone has been out of its place for any considerable time, where swelling and inflammation has been induced, and all attempts at reduction are resisted by muscular contraction, it will sometimes be necessary to bleed the patient; but what speedily and effectually relaxes the muscular system without a lasting prostration of strength, is the administration of tartar emetic, in such quantities as to induce the most distressing nausea and sickness, without immediate vomiting. While the patient labours under this influence, the dislocation can be reduced without much difficulty.

All that is necessary, after the reduction, is to apply cloths dipped in vinegar or camphorated spirits of wine to the part, and to keep it perfectly at rest, by proper bandages. Many bad consequences proceed from the neglect of this rule. A dislocation seldom happens without the tendons and ligaments of the joint being stretched, and sometimes torn. When these are kept easy till they recover their strength and tone, all goes very well; but if the injury be increased by too frequent an exertion of the parts, no wonder if they be found weak, and liable to disease ever after.

## DISLOCATION OF THE JAW.

THE lower jaw may be luxated by yawning, blows, falls, chewing hard substances, or the like. This accident is demonstrated by the patient's being unable to shut his mouth, or to eat any thing, as the teeth of the under jaw do not correspond with those of the upper; besides, the chin either hangs down, or is thrown toward one side, and the patient is neither able to speak distinctly, nor to swallow without considerable difficulty.

The usual method of reducing a dislocated jaw, is to set the patient upon a low stool, so that an assistant may hold the head firmly, by pressing it against his breast,

The operator is then to thrust his two thumbs, (they being first wrapped up with linen cloths, that they may not slip,) as far back into the patient's mouth as he can, while his fingers are applied to the jaw externally. After he has got firm hold of the jaw, he is to press it strongly downwards and backwards, by which means the heads of the jaw-bone may be easily pushed into their former cavities.

### DISLOCATION OF THE SHOULDER.

THE upper bone of the arm may be dislocated in various directions. It happens most frequently downwards, but very seldom directly upwards. From the nature of its articulation, as well as from its exposure to external injuries, this bone is the most subject to dislocation of any in the body. A displacement of it may be known by a depression or cavity on the top of the shoulder, and an inability to move the arm. When the dislocation is downward or forward, the arm is elongated, and a ball or lump is perceived under the arm-pit; but when it is backward, there appears a protuberance behind the shoulder, and the arm is thrown forward toward the breast.

The usual method of reducing dislocations of the shoulder is, to seat the patient upon a low stool, and to cause an assistant to hold his body, so that it may not give way to the extension, while another lays hold of the arm, a little above the elbow, and gradually extends it. The operator then puts a napkin under the patient's arm, and causes it to be tied about his own neck; by this, while a sufficient extension is made, he lifts up the head of the bone, and with his hands directs it into its proper place. There are various machines invented for facilitating this operation, but the hand of an expert surgeon is always more safe. In young and delicate patients, it is often a very easy matter to reduce the shoulder by extending the arm with one hand, and thrusting in the head of the bone with the other. In making the extension, the arm ought always to be a little bent.

## DISLOCATION OF THE ELBOW.

THE bones of the fore-arm may be dislocated in any direction. When this is the case, a protuberance may be observed on that side of the arm towards which the bone is pushed, from which, and the patients inability to bend his arm, a dislocation of this joint may be easily known.

Two assistants are generally necessary for reducing a dislocation of the elbow; one of them must lay hold of the arm above, and the other below the joint, and make a pretty strong extension, while the operator returns the bones into their proper place. Afterwards the arm must be bent, and suspended for some time with a sling about the neck.

Luxations of the wrists and fingers are to be reduced in the same manner as those of the elbow, viz: by making an extension in different directions, and thrusting the head of the bone into its place.

## DISLOCATION OF THE THIGH.

WHEN the thigh-bone is dislocated forward and downward, the knee and foot are turned out, and the leg is longer than the other; but when it is displaced backward, it is usually pushed upward at the same time, by which means the limb is shortened, and the foot is turned inwards.

When the thigh-bone is displaced forward and downward, the patient, in order to have it reduced, must be laid on his back and held by assistants, while, by others, an extension is made by means of strong cloths fixed a little above the knee. While the extension is made, the operator must push the head of the bone outward, till it gets into the socket. If the dislocation be outward, the patient must be laid upon his face, and, during the extension, the head of the bone must be pushed inward.

Dislocations of the knees, ankles and toes, are reduced

much in the same manner as those of the upper extremities, viz: by making an extension in opposite directions, while the operator replaces the bones. In many cases, the extension alone is sufficient, and the bone will slip into its place merely by pulling the limb with proper force. It is not hereby meant, that force alone is sufficient for the reduction of dislocations. Skill and address will often succeed better.

### OF SPRAINS.

SPRAINS are often attended with worse consequences than broken bones. The reason is obvious: they are generally neglected. When a bone is broken, the patient is obliged to keep the member easy, because he cannot make use of it; but when the joint is only sprained, the person, finding he can still make a shift to move it, is sorry to lose his time for so trifling an ailment. In this way he deceives himself, and converts into an incurable malady what might have been removed by quiet and care in a few days.

Besides an enfeebled joint during life, there are more serious consequences, which often follow neglected sprains, such as rheumatic affections in the part, white swellings, and the like.

There is indeed nothing so essential for a sprain as rest; for although it does not amount to a complete dislocation, yet the immediate injury, especially, when accompanied with a severe bruise, is sometimes nearly as great.

Pouring cold water upon a sprained limb or joint, is often useful, if it be done immediately, and is not continued too long; the part ought to be immediately afterwards wrapped up carefully in flannel, and the injured limb should not be suffered to hang down.

There is occasionally with sprains great inflammation and considerable swelling. If the general health permits, bleeding is here indicated, and if the operation can be performed near the part, it is best. Cloths dipped in a solution of the sugar of lead, should be applied and kept



constantly wet with the same, after the inflammatory symptoms have subsided. Opodeldoc well rubbed in, is a useful application; a supporting bandage should be worn for some time.

We have not long since seen a case in which the leg was broken and the ankle much sprained at the same time. The broken bone was cured in a few weeks, whilst the sprain continued to afford uneasiness for three months, although suitable means were used, and the nursing attended to faithfully.

It is indeed surprising when we look around and see how many aged and even middle aged people can trace their most troublesome and painful infirmities to neglected sprains; and at the same time view the apparent indifference with which these injuries are treated, by those who have such examples of suffering imprudence before their eyes.

## OF HERNIÆ, OR RUPTURES.

By this term we mean protrusions of a portion of the intestines, or other abdominal viscera, through natural openings in the human body, produced without any violent lesion or separation of the parts, but simply by a distention and enlargement of the passage through which the protrusion takes place.

It will be unnecessary to enter into an anatomical description of the parts concerned in hernia, or to describe particularly the different kinds of this disease that may occur; we will only mention the places in which ruptures most frequently appear, and point out the general principles for their reduction.

Ruptures generally appear on the groin, in the scrotum or bag containing the testicles, and at the navel. They are produced in children not unfrequently by excessive crying, and in adults by violent exertions of any kind, as leaping, carrying great weights, &c.

A rupture sometimes proves fatal before it is discovered. When sickness, vomiting, and obstinate costiveness, give reason to suspect an obstruction of the bowels, all

those places where ruptures usually happen ought carefully to be examined. The protrusion of a very small part of the gut will occasion all these symptoms; and if not returned in due time, will prove fatal.

On the first appearance of a rupture in an infant, it ought to be laid on its back, with its head very low, and its hips elevated. While in this posture, if the gut does not return of itself, it may easily be put up by gentle pressure. After it is returned, a piece of sticking-plaster may be applied over the part, and a proper truss or bandage must be constantly worn for a considerable time. The method of making and applying these rupture-bandages for children is pretty well known. The child must, as far as possible, be kept from crying, and from all violent exertions, until the parts have regained their natural tone.

In adults, when the gut has been forced down with violence, there is often great difficulty in returning it, and sometimes the thing is impracticable without an operation; a description of which is foreign to our purpose. As, however, the rupture can generally, when not too long neglected, be reduced without having recourse to any other means than what are in the power of every man, we shall briefly mention the method generally pursued.

The patient being laid on his back, with his breech elevated by pillows, the operator should grasp the tumour in his hand, and apply to it equable and gradual pressure, and at the same time with his fingers direct the protruded part towards the aperture through which it passed, until the whole is returned into the cavity of the belly.

When the rupture has been forced down with considerable violence, or has been permitted by neglect to remain long protruded, the difficulty of reduction is much increased. In such a case the patient should be freely bled, until some muscular relaxation is evident, and emollient laxative clysters may be given and repeated as often as may be required: These may consist of about a pint of any thin gruel, one table spoonful of common salt, and two of castor oil. Cold applications, such as pounded ice in bags or cloths wrung out of cold water, may be applied to the part.

During the use of these means, recourse should be had to gentle pressure of the tumour with the palm of the hand and the fingers, with the view of returning the bowels to their proper place. If there is still considerable resistence to the reduction of the part, a clyster of an infusion of tobacco may be administered. This should be prepared by macerating a dram of the leaves in a pint of water for about an hour, then pouring off the liquor; one half may be given, to be followed by the other, if necessary, in one or two hours. This is a dangerous remedy, and should be resorted to with great caution, and only in extreme cases, as it often produces great depression of the powers of life.

While the patient is under the influence of this powerful narcotic, the spasmodic stricture of the part through which the intestines protruded themselves, is removed, and a reduction can generally be effected; but if not, an operation should be resorted to immediately; this, of course, requires a surgeon.

When the protruded parts have been replaced, they should be retained in their proper situations by an appropriate truss, which, in adults, should ever afterwards be worn.

I would, says Dr. Buchan, beg leave to recommend it to every practitioner, when the patient complains of pain in the belly with obstinate costiveness, to examine the groins and every place where a rupture may happen, in order that it may be immediately reduced. By neglecting this, many perish, who were not suspected to have had ruptures. I have known this happen, he remarks, where half a dozen of the faculty were in attendance.

## OF CASUALTIES.



It is certain that life, when to all appearance lost, may often, by proper care be restored; and accidents frequently prove fatal, because proper means are not used to counteract their effects.

When any person appears to be suddenly deprived of life, our first business is to inquire into the cause; that in a great measure will determine the plan of treatment.

On this, as well as various other subjects, we have been so completely anticipated by Dr. Tissot, Dr. Buchan, and succeeding writers, that we calculate on selecting the most important of their observations, adding, at the same time, whatever may have occurred new in practice.

## OF SUBSTANCES STOPPED BETWEEN THE MOUTH AND STOMACH.

THOUGH accidents of this kind are very common, and extremely dangerous, yet they are generally the effect of carelessness. Children should be taught to chew their food well, and to put nothing into their mouths which it would be dangerous for them to swallow. But children are not the only persons guilty of this imprudence. Many adults put pins, nails, and other sharp pointed substances in their mouths upon every occasion, and some even sleep with the former there all night. This conduct is exceedingly injudicious, as a fit of coughing, or twenty other accidents, may force over the substances before the person is aware.



When any article is retained in the gullet, there are two ways of removing it, viz: either by extracting it, or pushing it down. The safest and most certain way is to extract it; but this is not always the easiest; it may therefore be more eligible sometimes to thrust it down, especially when the obstructing body is of such a nature, that there is no danger from its reception into the stomach. The substances which may be pushed down without danger are, all common nourishing ones, such as bread, flesh, fruits, and the like. All indigestible bodies, as cork, wood, bones, pieces of metal, and such like, ought if possible to be extracted, especially if these bodies be sharp pointed, as pins, needles, bits of glass, &c.

When such substances have not passed in too deep, we should endeavour to extract them with our fingers, which method often succeeds. When they are lower, we must make use of nippers, or a small pair of forceps. But this attempt to extract rarely succeeds, if the substance be of a flexible nature, and has descended far into the gullet.

If the fingers or nippers fail, or cannot be duly applied, crotchets, a kind of hooks, must be employed. These are made at once, by bending a piece of pretty strong iron wire at one end; it must be introduced in the flat way; and for the better conducting it, there should likewise be a curve or bending at the end it is held by, to serve as a kind of handle to it; which has this further use, that it may be secured by a string tied to it, a circumstance not to be omitted in any instrument employed on such occasions, to avoid such ill accidents as have sometimes ensued from these instruments slipping out of the operator's hand. After the crotchet has passed below the substance which obstructs the passage, it is drawn up again, and hooks up the body along with it. The crotchet is also very convenient when a substance somewhat flexible, as a pin or fish-bone, sticks across the gullet; the hook, in such cases, seizes them about their middle part, crooks and thus disengages them; or if they are brittle, serves to break them.

When the obstructing bodies are small, and only stop up a part of the passage, and which may either easily

elude the hook, or straighten it by their resistance, a kind of rings, made either of wire, wool, or silk, may be used. A piece of fine wire of a proper length may be bent into a circle about the middle, of about an inch diameter, and the long unbent sides brought parallel and near to each other: these are to be held in the hand, and the circular part or ring introduced into the gullet, in order to be conducted about the obstructing body, so as to extract it. More flexible rings may be made of wool, thread, silk, or small pack-thread, which may be waxed for their greater consistence. One of these is to be tied fast to a handle of iron wire, whalebone, or any kind of flexible wood, and by this means introduced, in order to surround the obstructing substance, and to draw it out. Several of these rings passed through one another may be used, the more certainly to lay hold of the obstructing article, which may be involved by one if another should miss it. These rings have one advantage, which is, that when the substance to be extracted is once laid hold of, it may then, by turning the handle, be retained so long in the ring thus twisted, as to be moved every way, which must in many cases be a considerable advantage.

Another material employed on these unhappy occasions, is the sponge. Its property of swelling considerably on being wet, is the principal foundation of its usefulness here. If any substance is stopped in the gullet, but without filling up the passage, a bit of sponge may be introduced into that part which is unstopt, and beyond the substance. The sponge soon dilates, and grows larger in this moist situation; and indeed the enlargement of it may be forwarded by making the patient swallow a few drops of water. Afterwards it is to be drawn back by the handle to which it is fastened; and as it is now too large to return through the small cavity by which it was conveyed in, draws out the obstructing body along with it.

The compressibility of sponge is another cause of its usefulness in such cases. A pretty large piece may be compressed or squeezed into a small size, by winding a string of tape closely around it, which may be easily unwound and withdrawn, after the sponge has been introduced.

When, after all our endeavours, we are obliged to leave the obstructing body in the part, the patient must be treated as if he had an inflammatory disease. He should be bled, kept upon a low diet, and have his whole neck surrounded with emollient poultices. The like treatment must also be used, if there is any reason to suspect an inflammation of the passages, though the obstructing body be removed.

When a fish-bone sticks in the throat, and cannot be disengaged, it is recommended to swallow very strong vinegar, a few drops at a time for half an hour or an hour; this will soften, and indeed decompose the bone, so that it can easily be pushed down or extracted.

Although it does not come precisely under this head, we will here mention a case which occurred some years since in Philadelphia. A child, between two and three years old, swallowed, while playing with it, an octagonal gold breast-pin set as usual with stones of different sizes, which added considerably to its thickness; its circumference was equal to that of a moderate sized thumb-nail, and to the inner side was attached a tongue or pin at least an inch and a fourth in length. The article caused no pain in the stomach. Professor James, the family physician, not being at hand, we were called in, and found the distressed mother preparing to give the child an emetic, which would in all probability have proved fatal. Small doses of castor oil were immediately prescribed; a tea spoonful was administered every twenty minutes in a little mint water; the purging, which soon commenced moderately, was thus kept up; and in less than eight hours the breast-pin was discharged downwards. The child sustained no injury; its drink during the plan of treatment was demulcent. Dr. James called and saw the child in our absence, but did not advise any alteration in the mode of treatment which so happily proved successful.

## OF DROWNED PERSONS.

WHEN a person has remained above a quarter of an hour under water, there can be no considerable hope of his recovery. But as several circumstances may happen to have continued life beyond the ordinary term, we should never too soon resign the unhappy object to his fate, but try every method for his relief, as there are many well attested proofs of the recovery of persons to life and health, who had been taken out of the water apparently dead, and who remained a considerable time without exhibiting any signs of life.

The first thing to be done, after the body is taken out of the water, is to convey it as soon as possible to some convenient place where the necessary operations for its recovery may be performed. In doing this, care must be taken not to bruise or injure the body by carrying it in any unnatural posture, with the head downwards, or the like.

In attempting to recover persons apparently drowned, the principal intentions to be pursued are *to restore the natural warmth*, upon which all the vital functions depend; and to excite these functions by the application of stimulants, not only to the skin, but likewise to the lungs, intestines, &c.

Though cold was by no means the cause of apparent death, yet it will prove an effectual obstacle to recovery. For this reason, after stripping him of his wet clothes, his body must be strongly rubbed for a considerable time with coarse linen cloths, as warm as they can be made; and as soon as a well heated bed can be got ready, he may be laid into it, and the rubbing should be continued. Warm cloths ought likewise to be frequently applied to the stomach and bowels, and hot bricks, or bottles of warm water, to the soles of his feet, and to the palms of his hands.



Strong volatile spirits should be frequently applied to the nose; and the spine of the back and pit of the stomach may be rubbed with warm brandy or spirits of wine. The temples ought also to be chafed with volatile spirits; and stimulating powders, as that of tobacco may be blown up the nostrils.

To renew the breathing, a strong person may blow his own breath into the patient's mouth with all the force he can, holding his nostril at the same time. When it can be perceived, by the rising of the chest or belly, that the lungs are filled with air, the person ought to desist from blowing, and should press the breast and belly so as to expel the air again; and this operation may be repeated for some time, alternately inflating and depressing the lungs, so as to imitate natural respiration.

If the lungs cannot be inflated in this manner, it may be attempted by blowing through one of the nostrils, and at the same time keeping the other close. Dr. Monro, for this purpose, recommends a wooden pipe fitted at one end for filling the nostril, and at the other for being blown into by a person's mouth, or for receiving the pipe of a pair of bellows, to be employed for the purpose, if necessary.

When air cannot be forced into the chest by the mouth or nose, it may be necessary to make an opening into the wind-pipe for this purpose. It is needless, however, to spend time in describing this operation, as it should not be attempted unless by persons skilled in surgery.

To stimulate the intestines, the fumes of tobacco may be thrown up in the form of a clyster. There are various pieces of apparatus contrived for this purpose, which may be used when at hand; but where these cannot be obtained, the business may be done by a common tobacco pipe. The bowl of the pipe must be filled with tobacco well kindled; and, after the small tube has been introduced into the fundament, the smoke may be forced up by blowing through a piece of paper full of holes wrapped round the mouth of the pipe, or by blowing through an empty pipe, the mouth of which is applied close to that of the other. Should it be found impracticable to

throw up the smoke of tobacco, clysters of warm water, with the addition of salt and wine or spirits, may be frequently administered.

While these things are doing, some of the attendants ought to be preparing a warm bath, into which the person should be put, if the above endeavours prove ineffectual. Where there are no conveniences for using the warm bath, the body may be covered with warm salt, sand, or ashes. Tissot mentions an instance of a girl who was restored to life, after she had been taken out of the water, swelled, bloated, and to all appearance dead, by laying her naked body upon hot ashes, covering her with others equally hot, putting a bonnet on her head, and a stocking round her neck, stuffed with the same, and throwing coverings over her. After she had remained half an hour in this situation, her pulse returned, she recovered speech, and cried out, '*I freeze, I freeze;*' a little cherry-brandy was given her, and she remained buried, as it were, under the ashes for eight hours; afterwards she was taken out, without any other complaint except that of lassitude or weariness, which went off in a few days. The Doctor mentions likewise an instance of a man who was restored to life, after he had remained six hours under water, by the heat of a dunghill.

Until the patient shews some signs of life, and is able to swallow, it would be useless and even dangerous to pour liquors into his mouth. His lips however, and tongue, may be frequently wet with a feather dipt in warm brandy or other strong spirits; and, as soon as he has recovered the power of swallowing, some cordial ought every now and then to be given.

We are by no means to discontinue our assistance as soon as the patients discover some tokens of life, since they sometimes expire after these first appearances of recovering. The warm and stimulating applications are still to be continued, and small quantities of some cordial liquor ought frequently to be administered.

Such persons as have the misfortune to be deprived of the appearances of life by a fall, a blow, suffocation, or the like, must be treated nearly in the same manner as those who have been for some time under water.

"I once attended a patient" says Dr. Bucian, "who was so stunned by a fall from a horse, that for above six hours he scarcely exhibited any signs of life; yet this man, by being bled, and proper methods taken to keep up the vital warmth, recovered, and in a few days was perfectly well." Dr. Alexander gives an instance to the same purpose in the Edinburgh Physical and Literary Essays, of a man who was to all appearance killed by a blow on the breast, and recovered upon being immersed for some time in warm water. These, and other instances of a similar nature, which might be adduced, amount to a full proof of this fact, that many of those unhappy persons who lose their lives by falls, and other accidents, might be saved *by the use of proper means duly persisted in.*

## OF NOXIOUS VAPOURS.

Air may be many ways rendered noxious or even destructive to animals. This may either happen from its vivifying principles being destroyed, or from subtle exhalations with which it is impregnated.

The vapour which exhales from wine, cyder, beer, or other liquors in the state of fermentation, contains something poisonous, which kills in the same manner as the vapour of coal. Hence there is always danger in going into cellars where a large quantity of these liquors is in a state of fermentation, especially, if they have been close shut up for some time. There have been many instances of persons suddenly dying on entering such places, and of others who have with difficulty escaped.

When subterraneous caves, that have been very long shut, are opened, or when deep wells are cleaned, which have not been emptied for several years, the vapours arising from them produce the same effects as those mentioned above. For this reason no person ought to venture into a well, pit, cellar, or any place that is damp,

and has been long shut up, until the air has been sufficiently purified. It is easy to know when the air of such places is unwholesome, by letting down a lighted candle. If this continues to burn, people may safely venture in; but where it is extinguished, no one ought to enter until the place has been well opened, and the air purified by fire.

The offensive smell of lamps and of candles, especially when their flames are extinguished, operate like other vapours, though with less violence, and less suddenly. There have, however, been instances of people killed by the fumes of lamps which had been extinguished in a close chamber; and persons of weak delicate breasts generally find themselves quickly oppressed in apartments illuminated with many candles.

Such as are sensible of their danger in these situations, and retreat seasonably from it, are generally relieved as soon as they get into the open air.

Persons overcome by the influence of noxious vapours, should be carried into the fresh air immediately. The feet and legs should be put into warm water, and well rubbed. Attempts should be made as has been directed under the article drowning, to inflate the lungs; sharp injections should also be given; two or three ounces of spirits of turpentine in flaxseed tea, or a saturated solution of common salt will answer well for this purpose, whenever stimulants can be introduced into the stomach, ether or the like may be used freely.

Mr. Tossach, surgeon at Alloa, relates the case of a man suffocated by the effluvium of burning coal, whom he recovered by blowing his breath into the patient's mouth, bleeding him in the arm, and causing him to be well rubbed. And Doctor Frewen, of Sussex, mentions the case of a young man who was stupified by the smoke of sea coal, but was recovered by being plunged in cold water, and afterwards laid in a warm bed.



## EFFECTS OF EXTREME COLD.

WHEN cold is extremely severe, and a person is exposed to it for a long time, it proves mortal, in consequence of its stopping the circulation in the extremities, and forcing too great a proportion of blood towards the brain; so that the patient dies of a kind of apoplexy, preceded by great sleepiness. The traveller, in this situation, who finds himself begin to grow drowsy, should redouble his efforts to extricate himself from the imminent danger he is exposed to. This sleep, which he might consider as some alleviation of his sufferings, would, if indulged, prove his last.

It frequently happens, that the hands or feet are so benumbed or frozen, as to be in danger of a mortification, if proper means are not used to prevent it. The chief danger in this situation arises from the sudden application of heat. It is very common, when the hands or feet are pinched with cold, to hold them to the fire; yet reason and observation shew that this is a most dangerous and imprudent practice.

Every person knows that if frozen meat, fruits, or roots of any kind be brought near the fire, or put into warm water, they will be destroyed by rottenness or a kind of mortification; and that the only way to recover them, is to immerse them for some time in very cold water. The same observation holds with regard to animals in this condition.

When the hands or feet are greatly benumbed with cold, they ought either to be immersed in cold water, or rubbed with snow until they recover their natural warmth and sensibility; after which, the person may be removed into an apartment a little warmer. When the hands are even but slightly affected with cold, the best way to restore a proper degree of warmth, is by washing them in cold water, and continuing to rub them well for some time.

## EFFECTS OF EXTREME HEAT.

THE effects of extreme heat are no less fatal, and much more sudden than those of cold. In hot countries people frequently drop down dead in the streets, exhausted with heat and fatigue. In this case, if any warm cordials can be poured into the mouth, it ought to be done. If this cannot be effected, they may be thrown up in form of a clyster. Volatile spirits and other things of an exciting nature may be applied to the skin, which should be well rubbed with coarse cloths, or other stimulating articles. Where there appears to be a tendency of blood to the head, bleeding becomes necessary.

## PREFACE TO THE DISPENSATORY.



IN attempting to offer a list, and partly a description of those articles which have been recommended as medicinal in the course of this work, perhaps also of some not mentioned, we feel considerable embarrassment and difficulty. Prescribed limits, and even the want of time, prevent us from entering so fully into the investigation of individual medicines and their qualities, as we could wish. A work of this kind also embraces, necessarily, such a variety of subjects, many of them appearing at different times in different aspects, according to their connexion with other objects also under consideration, that the labour seems to enlarge itself in its advancement, instead of drawing towards a close.

We did not, however, pretend at the beginning to offer every thing which is known in relation to medical science: were such an attempt made, neither one, nor fifty volumes, would contain the necessary matter. This work too, is, emphatically speaking, a pioneer in the western country, and the author had to encounter difficulties which, it is believed, will be at least in part cleared out of the way of succeeding writers.

In compiling this Dispensatory, we are much indebted to the American Dispensatory, by JOHN REDMAN COXE, Professor of Pharmacy, &c. Philadelphia, to Dr. PARIS'S Pharmacologia, and several other standard works. To the various authors whom we have consulted on many subjects, and to whom we are under obligations, no apology is made. The liberal minded man of science is rewarded, and not robbed, when his discoveries or improvement tend, by extensive dissemination, to increase the amount of human comforts.

The articles about to be mentioned will be arranged in

alphabetical order; the doses *for an adult*, are directed under each. It will be necessary, in administering many of them, to have a set of apothecaries' scales and weights, also a graduated glass measure for fluids; these can be obtained at a trifling expense.

We have made several attempts to ascertain the proportional doses for different ages, and in numerous instances, whilst writing on the practice, the doses for children have been particularly specified. But after all, much must be left to the judgment and skill of the person who administers the medicine. The following general proportions may be observed, but they are not intended as exact rules:

A patient between fifteen and twenty may take three-fourths of the dose for an adult; from nine to fifteen, one half; from six to nine, one third; from three to six, one fourth; from one to three, one sixth; and below one, a tenth or twelfth.

Aged people generally require smaller doses of evacuating medicines, than those in the vigour of life. So much depends upon peculiarity of constitution, the nature and period of the disease, the season, the climate, &c. that perhaps it is impossible to come nearer in directing the various doses for different individuals and conditions. Every general rule respecting the doses of medicines will have exceptions; thus children will bear much larger doses of calomel, in proportion, than adults.

*Apothecaries' Weights.*

Twenty Grains make	One Scruple.
Three Scruples,	One Dram.
Eight Drams,	One Ounce.
Twelve ounces,	One Pound.
A Gallon contains	Eight Pints.
A Pint,	Sixteen fluid Ounces.
An Ounce,	Eight fluid Drams.

A silver tablespoon measures about half an ounce; a tea spoonful about one fourth of a table spoonful; sixty drops, about one tea spoonful.

Although simplicity in medical prescriptions is desirable, especially in a work of this nature, yet frequently combinations of different articles will effect purposes



which cannot be so readily brought about by any solitary substance. We may instance here James's powder, Dover's powder, &c. For private families, and indeed country physicians, it is often best to procure complicated medicines already prepared, from a reputable and skilful apothecary; but the combination of a number of these mixtures has been explained, that in cases of emergency, intelligent heads of families may not be altogether at a loss.

It will be found, that the notice of a great number of vegetable substances in common use among nurses, has been omitted. When giving general directions for nursing, somewhat was said on this subject. We however by no means object to the use of valuable articles, because they may not be here enumerated, and recollect with peculiar satisfaction having once effected a cure in a case of very obstinate dysentery, (where other means could not be obtained,) by means of infusions of the dog wood, the wild cherry, the red oak, and the dewberry barks, not all in combination at one time, but the proportion and composition varied, as occasion appeared to require.

The order which has been chosen for the arrangement of the dispensatory, will, it is true, cause in some instances, a little trouble in searching for an article; but taking all circumstances into view, it is considered the most convenient that could have been adopted. Experience, and want of success in others, have shown, that in a book intended as a *Family Physician*, methodical and scientific arrangements are inadmissible, since they presuppose an acquaintance with words, terms, &c. which is not possessed by the generality of readers.

It was intended to have written something under a separate head, concerning articles of diet for the sick; but this subject has been touched upon so frequently in various parts of the work, that it is thought advisable to avoid unnecessary repetitions. As a general rule, diet for the sick should be simple, even when nutritious, and it ought to be prepared with the utmost cleanliness and delicacy. Every good housewife is acquainted with the mode of cooking articles most commonly used, and we have found by painful experience in medical practice.

that slovenly, awkward, and inattentive nurses can rarely, if ever, receive instruction to advantage.

The brief article written on the subject of nursing the sick, is seriously recommended to all; to give directions for conduct in *every particular emergency*, is beyond our power, but proper attention paid to leading views and principles will naturally lead the sick person's attendant into an acquaintance with more minute duties, and with those thousand little attentions which alleviate pain and cheer the spirits.

#### INFUSIONS.

It will be well to note, that there is a considerable difference between preparing an infusion and a decoction. Infusions may be made with either cold or hot water. If hot water is used, the vessel in which the article is contained should be kept covered, and in a warm place. In infusions it is often advisable to pour boiling water on the article or articles, but the contents of the vessel should not be subjected to a boiling heat afterwards. Infusions are generally extemporaneous productions, and should be prepared in small quantities at a time, to prevent spoiling by becoming sour. This tendency may be, however, prevented in some cases, for a time, by the addition of a small quantity of proof spirits, say an ounce to a pint of the infusion; this ought not to be added where there is a disposition to fever in the patient for whom the medicine is prepared.

#### DECOCTIONS.

Decoctions differ from infusions in the action of the menstruum being assisted by a continuance of boiling heat. Where the medical principle contained in the article is of a volatile nature, boiling is inadmissible, as it causes a tendency to decomposition. Decoction, therefore, can only be used to advantage for the extraction of principles not easily volatilized nor altered. Decoctions should be continued by a gentle and not an excessive heat. In compound decoctions, it is often advisable not to put in all the articles at once, but successively, in the order of their hardness, and the facility with which their active qualities are rendered up to the menstruum.

## PILLS.

These may generally be made by rubbing carefully, and for a length of time, the active article or articles in a stone or iron mortar, with a little crumb of bread or powdered and moistened gum arabic; sometimes molasses itself is a sufficient menstruum. By weighing the medicines at first separately, and afterwards dividing the mass, when brought to a proper consistence, into a certain or definite number of equal proportions, the amount of active agency in each portion can be accurately ascertained. As a caution to the inexperienced, we suggest the propriety of adding very little moisture at a time to the mass, as it is apt to become softer by rubbing than was anticipated.

## WATER.

Rain and spring water are generally the purest, but in the western country a great deal of the water is impregnated with lime or some mineral substance, which occasionally effects a chemical action on articles infused or boiled.

Distilled water ought, if possible, to be used in preparing medical prescriptions. The process of distillation should be conducted in very clean vessels, and ought to cease when about two thirds have passed over. The distilled water should be kept in close glass bottles.

## WINE.

Wines are often valuable medical agents, but are frequently charged with so considerable a portion of acid, as to prove injurious; therefore it is important to endeavour to procure wine that is sound and good. The wines that are made in private families are, owing to the want of body and a deficiency in the apparatus, &c. for making them, rarely fit for medical use. What are commonly called the white wines, such as Madeira, Lisbon, &c. are highly stimulant and tonic. The red wines, as Port and Claret, are not so stimulant as the white wines, but more astringent. Malaga wine, (or rather the composition so called, may be justly considered as a nuisance in a sick

chamber; indeed it often contains poisonous ingredients.

Persons unaccustomed to the qualities of wines, often err in judgment, supposing the sweetest to be the best. Thus we have known a bottle of excellent Port wine to stand for months in a house where it was much needed, being deemed sour and unfit for use, while the sick were drinking unwholesome Malaga. The austere and astringent taste of Port and Claret, is often mistaken for sourness.

#### CORDIALS.

By cordials, we mean medicines which possess warm, stimulating qualities, and have a tendency to raise, temporarily, the spirits. Under this head we may enumerate peppermint cordial, wine, brandy, &c.; perhaps even good tea and coffee may be included. Often indeed, by mental impulse, the countenance and cheering converse of a friend afford an evident and renovating influence to the spirits and vital functions.

But many substances, which are *prepared to be sold cheap*, and are denominated cordials, owing to a combination of impure oils and intoxicating or *narcotic* drugs disguised by syrup and flavouring matters, are very detrimental to health. This is so often the case, that we frequently hear country people, who are unaccustomed to such drinks, and who consequently regard them as luxuries, complain of severe head-achs and sickness after partaking of them but moderately. Many of them produce intoxication, not as usual with alcoholic preparations in a short time after being drank, but often on rising from bed the succeeding morning, their deleterious influence first manifests itself. The evils resulting even to those who do not drink to excess, from sophisticated and adulterated liquors, are far more numerous and serious than is generally imagined. Particular caution should therefore be used in providing alcoholic stimulants for the enfeebled and sick. Where sound brandy, wine, &c. cannot be obtained, good old whiskey, properly diluted and prepared with milk and sugar, or lemon juice and the like, had better be used when necessary, than the trash which is so frequently offered for sale, as being of foreign manufacture.



## DISPENSATORY.



## ACIDS.

*Sulphuric Acid.*

This is an excellent tonic: when sufficiently diluted, it increases the appetite, quenches thirst, and promotes digestion. It may be taken in doses of from five to twelve drops in a half pint of water, or a little mucilage, five or six times a day. In order to prevent mineral acids from injuring the teeth, which they have a tendency to decompose, a quill should be used, through which they can be sucked; the mouth should afterwards be rinsed.

*The Muriatic and Nitric Acids*

Possess in a considerable degree the same qualities as the sulphuric; the dose should be about the same. Nitric acid has been much spoken of as a remedy for syphilis, especially in warm climates. We have no doubt of its usefulness in removing the secondary symptoms; and also of its frequent efficacy in scrofulous cases. These acids, in a concentrated state, are all powerful caustics. The muriatic acid has been used with great advantage in typhus fevers.

*Vinegar.*

Its operation on the system is stimulant; it also promotes the discharge of urine; its vapour is frequently inhaled through a funnel in sore throats, &c. Vinegar is also a very proper article to be burned on a hot shovel, or sprinkled in chambers of sick people, when there is an unpleasant effluvia; but its principal use in medicine is as a menstruum for various other articles, with which it enters into composition, sometimes affording chemical changes.

*Lemon Juice.*

This is an agreeable and powerful refrigerant and antiseptic. Its powers are increased by saturating it with the muriate of soda or common salt. This mixture is recommended in dysentery, remittent fever, &c. When mixed with the carbonate of potass, and drank immediately, it has a tendency to stop vomiting; dose—a scruple of the carbonate dissolved in ten drams of water and an ounce of lemon juice. Lemonade is often a pleasant beverage for the sick, and punch, which is formed by the addition of a little spirits, is occasionally a valuable cordial. Lemon juice is also used as an antiscorbutic.

## ALUM

Has a sweet, rough, and acidulous taste; it is soluble in water, but not in alcohol. Alum is, internally, a powerful astringent in all hæmorrhages; externally, in solution, it will be found an excellent astringent lotion. When used either internally or as an external application, or injection, it should never be combined with the vegetable astringents, as these will decompose the alum and render it inefficacious. Given internally, the dose is about ten grains in substance; larger quantities are apt to excite nausea and act upon the bowels. The alum whey is another form of administration. This may be made by boiling two drams of alum in a pint of milk, and then straining; dose—a wine glassful.

## ANTIMONIAL WINE

Is an excellent *domestic* medicine, though, as it is not always made of uniform strength, it is perhaps less safe than an extemporaneous solution of the tartar emetic. To diseases of children the antimonial wine is particularly appropriated. At birth, it has been given in doses of one or two drops, to relieve difficult breathing, but it is safer in children more advanced.

After a child has attained the third or fourth month of its age, the dose to produce vomiting is five or ten drops, according to the urgency of the case. If, however, the disease be the croup, much larger doses may be administered. To a child six months old, under such circumstances, thirty drops may be given every fifteen minutes until vomiting is produced.

The dose for an adult is one or two table spoonful.

## ANISE SEED.

The seeds brought from Spain are preferable to any others. Anise seed has a grateful aromatic smell, and a pleasant, warm, sweetish taste. The essential oil is entirely extracted by maceration in rectified spirits.

ALCOHOL.—*Rectified Spirits of Wine.*

Alcohol is a term of Arabian origin, and implies the purer part of a substance separated from its impurities. In its purest state, alcohol is quite colourless and clear, and freed from all aqueous particles. It is miscible with water in all proportions.

ALCOHOL DILUTED.—*Proof Spirit.*

Diluted alcohol is employed in the preparation of all tinctures and distilled spirits, which are not expressly directed to be prepared with alcohol.

Diluted alcohol is made by mixing equal parts of rectified spirits of wine, ("*pure Alcohol*,"), and distilled water. In this state alcohol is better qualified for taking up the principles of vegetables than rectified spirits. On the living body alcohol acts as a most violent stimulus.

Vinous spirits, however, in appropriate doses, and properly diluted, are applied to very valuable purposes in the cure of diseases.

## ASAFÆTIDA.

This is the most powerful of all the fœtid gums, and an exceedingly valuable remedy. It is commonly employed in hysterical complaints, hypochondria.

driasis, some cases of dyspepsia, flatulent colics, and in most nervous discases; but its chief use is as an antispasmodic.

The dose, in substance, is from five to twenty grains. Of the tincture from one to two drams may be taken. When administered as an injection, from one to two drams of the gum should be well rubbed up in a mortar, with warm milk or water. Asafœtida is often given in combination with bitter extracts, purgatives, or some preparation of opium, as symptoms indicate. It loses much of its strength by being kept a length of time. Half a dram of camphor, well rubbed with six drams of asafœtida, forms a mass fit for plasters.

#### ADHESIVE PLASTER.

Take of litharge plaster, five parts; white resin, one part; melt them together and make an adhesive mass. This, when spread on linen or leather, forms the plaster which is chiefly used for keeping on other dressings, for retaining the edges of recent wounds together, when we are endeavouring to cure them by the first intention, and for giving mechanical support to new flesh. In contracting the size of ulcers, by drawing their edges together, this plaster is often useful.

#### ARROW ROOT

Contains in a small bulk a great proportion of nourishment. The powdered root boiled in water forms a pleasant jelly, superior either to sago or tapioca; and is much recommended as an article of diet for children and invalids. It may be prepared for use by adding to a table spoonful of the powdered root as much cold water as will make it into a paste; then pour on a half pint of boiling water, stir briskly; and boil for a few minutes, when the mixture will become a clean smooth jelly; a sufficiency of sugar and nutmeg, to make it agreeable, may now be added. If much debility is present, wine or brandy should be combined with it in quantities proportioned to the age and strength of the patient. For infants, fresh milk, or milk and water, may be substituted for the water.

#### ALOES

Is the hardened juice of the aloe plant. In the lump, it is of a yellowish red, but when reduced to powder, it is of a golden colour. It has but little smell; its taste is exceedingly bitter, though somewhat spicy. Aloes is an excellent purgative, operating more especially on the lower part of the intestines. It is one of the best remedies for habitual costiveness. This cathartic may be administered in powder alone or in combination with some aromatic, as the canella alba, ginger, or the essential oils: or it may be given with some of the drastic cathartics, as scammony or colocynth. When given alone, the dose is from five to fifteen grains. On account of its extreme bitterness, the form of pill is the best mode of administration.

Aloes forms the basis of most of the patent antibilious and purging pills, such as Anderson's, Hooper's, Fothergill's, &c.

#### AMMONIA, OR THE VOLATILE ALKALI.

This, in its gaseous form, is not an article of the materia medica, but becomes so when made to impregnate water or alcohol. Ammonia, in combination with the acids, forms neutral salts. It is principally valuable on account of its highly stimulant power.

## MURIATE OF AMMONIA, OR SAL AMMONIAC.

This salt has an acrid, pungent, urinous taste, with but little smell. It is soluble in water, and during its solution, produces a considerable degree of cold; on this account it is serviceable as an external application in mania, apoplexy from plethora, and in violent head-achs. It is seldom used internally.

## WATER OF AMMONIA.

The water of ammonia has a strong pungent odour, and an unpleasant acrid taste. Its principal use is as an internal and external stimulant. It may be given in doses of from ten to twenty drops, largely diluted; or it may be applied externally as a rubefacient, alone, or combined with sweet oil, forming a volatile soap liniment.

## CARBONATE OF AMMONIA.

This article is soluble in water, though insoluble in alcohol. It is employed for arousing persons from fainting and hysterical fits. To effect this purpose, it should be applied to the nose in its most concentrated form. It is also given internally as a stimulant, in low forms of disease, in doses of from five to twenty grains. It may be given in the form of pills, or in julep, made by dissolving it in mint water, sweetened with white sugar.

## SPIRIT OF MINDERERUS.

This is formed by saturating good vinegar with the carbonate of ammonia. When assisted by a warm regimen, it proves a powerful sudorific, and as it operates without increasing the activity of the circulation, it may be administered even in febrile and inflammatory diseases. It can often be induced to act upon the kidneys by walking about in the cool air. The common dose is a table spoonful, given as frequently as the nature of the case demands.

## GUM AMMONIAC.

This is a concrete, gummy, resinous substance, brought from the East Indies in large masses, composed of little lumps of a milky colour, which, upon exposure to the air, become yellowish. Ammoniacum has a sickening-sweetish taste, followed by a bitter one. It is partly soluble in water and in vinegar. It is stimulant in its effect upon the system, and in doses of from ten to thirty grains, is an excellent antispasmodic and expectorant. It may be administered in pills, or dissolved in vinegar. Externally applied as a plaster, or rubbed on the part in the form of solution in vinegar, the gum ammoniac is supposed to soften and ripen hard tumours; in chronic inflammation of the liver, where that organ has become enlarged, and scirrhus, it has been found very beneficial.

## ARSENIC.

This is one of the most virulent poisons, nevertheless it is at times a very valuable medical agent; but in its administration the greatest caution is necessary. The safest mode of giving it is in the form of Fowler's solution;



this contains about sixty-four grains of the arsenic to a pint of the fluid, so that the dose may be readily graduated to suit the age of the patient. From five to twelve drops may be given two or three times a day, and gradually increased with caution. Its effects are tonic; and given in fever and ague, it has been found highly efficacious. When the dose of Fowler's solution, is too large, it produces purging, sickness, dizziness, and pains in the bowels.

#### GUM ARABIC.

When pure, this gum is dry, brittle, transparent, colourless, insipid, and upon exposure to the air, undergoes no change. It is also very nutritious. It is soluble in water, though not in alcohol. The solution forms a pleasant mucilaginous drink, which is given with benefit in some cases of dysentery and catarrh. The quantity to be taken is not limited; it must depend entirely on the nature of the case.

#### PERUVIAN BARK.

This medicine, which comes from South America, is occasionally of different strength, and not unfrequently adulterated; there are several kinds.

It is considered a powerful and permanent tonic, and has ascribed to it, also, antispasmodic and antiseptic powers. When used in powder the dose is from twenty grains to two drams, and sometimes more, every two, three, or four hours. It is also used in decoction and tincture. The decoction is made by boiling an ounce of the bark in a pint and a half of water for ten minutes, and straining it while hot; a little Virginia snake root is often added. Dose —two thirds of a wine glassful at intervals, as above advised.

The simple tincture is prepared by pouring on seven ounces of the powdered bark two pints of proof spirit, letting it stand fifteen days, and then filtering.

The compound, or Huxham's tincture of bark, is prepared thus: Take Peruvian bark powdered, two ounces; orange peel dried, an ounce and a half; Virginia snake root bruised, three drams; saffron, one dram; cochineal, two scruples; diluted alcohol, one pint and a half: digest for ten days and filter. Doses of the two last preparations, a table spoonful every two or three hours.

A preparation from the Peruvian bark in combination with an acid, the sulphate of quinine, is supposed to be preferable to the bark itself, especially in intermittents; the dose is from one to three grains, taken at the same intervals as have been directed.

Sometimes the bark, and especially when administered in substance, has a cathartic effect, in this case, it is necessary to combine with it a small quantity of opium or laudanum. The bark, when given in substance, can be most conveniently mixed with a little milk or wine.

#### BLACK DROP.

This preparation of opium has been long known and esteemed, as being more powerful in its operation, and less distressing in its effects, than any tincture of opium. The directions to prepare it are as follows: Take half a pound of opium sliced, three pints of the juice of the wild crab, or strong lemon juice, one and a half ounce of nutmegs, and half an ounce of saffron. Boil them to a proper consistence, then add a quarter of a pound of sugar and two tea spoonful of yeast; set the whole in a warm place near the fire for six or eight weeks, then place it in the open air until it becomes a syrup; lastly, decant, filter and bottle it up, adding a little sugar to each bottle; one

drop of this preparation is considered equal to about three of the tincture of opium (or laudanum.) It would appear that an acetate of morphia is formed, which is more active and less distressing in its effects than any other narcotic combination.—*Paris's Pharmacologia*.

#### BLUE VITRIOL, OR SULPHATE OF COPPER.

This article is chiefly employed as a stimulant to indolent ulcers, as a styptic to stop the effusion of blood, or for the destruction of warts, fungous excrescences, &c. It is sometimes used as an emetic, for the purpose of dislodging poisonous articles from the stomach; the dose in this case is from five to twelve grains; combined with tartar emetic, in doses of two grains, or a little more of each, it constitutes the dry vomit of Dr. Marryatt: this he recommends in the early stage of consumption. No fluid is to be drunk during its operation. This medicine he advises to be taken two or three times a week. Blue vitriol is a very powerful agent, and should be used with caution.

#### BEAR BERRY.—*Uva Ursi*.

This is an evergreen shrub, a native of Europe and America, the leaves of which have an astringent taste, followed by bitterness, and are both tonic and astringent. They are useful in diarrhœa, dysentery, and in many of the diseases of the urinary passages, particularly in ulcerations of the kidneys and bladder. The powdered leaves are administered in doses of from ten to sixty grains three or four times a day.

#### BLISTERING FLIES, OR CANTHARIDES.

These insects contain a peculiar blistering principle, and it is principally on this account that they are used in the cure of disease. The tincture of cantharides is however sometimes used internally, though great caution should be taken not to give an over-dose, for by neglect of this, the most distressing symptoms, and even death, have been induced. The dose of the tincture is from ten to twenty drops, three or four times a day.

When a blistering plaster is to be made, take a piece of linen, muslin, or leather, the size and shape required, spread it over with simple cerate, and into this press as many of the powdered flies as will readily adhere. The plaster should then be applied, and kept on the part until the blister is raised; this is generally effected in ten or twelve hours, unless it is applied to the head, here nearly double this time will be required to produce the effect. The head ought to be shaved some time before the application of the blister to it.

Blistering ointment may be obtained ready prepared from the apothecaries. It will keep a considerable time, and it is most convenient to obtain the article in this form, as the blister is afterwards dressed with greater facility and less pain than is consequent to the mode of operation above directed. Before applying the blister, the parts should be well wetted with warm vinegar, or camphorated spirits. Sometimes, when a sudden effect is required, it will be necessary to use spirits of turpentine or tincture of cantharides for this purpose.

Blisters may be dressed with wilted cabbage leaves, basilicon ointment, or simple cerate; when it is required to keep them sore, the basilicon will generally answer; if necessary, it can be rendered more stimulating by incorporating with it, when made, spirits of turpentine.

## BRITISH OIL.

Take oil of turpentine, eight ounces; Barbadoes tar, (or *rock oil*), four ounces; oil of rosemary, four drams. This preparation is often used externally in chronic rheumatism, &c.

## PEARL BARLEY.

This is a very nutritious and mucilaginous substance, and when boiled with water makes a suitable drink in inflammatory diseases, especially affections of the breast. A decoction of pearl barley with gum arabic is useful, where there is a difficulty and burning sensation in passing urine. In most cases, preparations of pearl barley may be seasoned and flavoured so as to be very palatable.

## BURGUNDY PITCH

Is confined altogether to external use. Spread on leather it is an excellent rubefacient, occasioning some irritation of the skin. A plaster applied to the breast, does good in protracted catarrhs, whooping-coughs, and sometimes in incipient consumptions. In rheumatic and other superficial complaints, it has also, when applied to the part affected, been found highly serviceable.

## MERCURIAL, OR BLUE PILL.

Take of purified quicksilver and conserve of roses, each one ounce; liquorice in powder, half an ounce; rub the mercury with the conserve until all the globules disappear: then add the liquorice, and form a mass, to be immediately divided into four hundred and eighty pills. Where it is desirable to excite a slight degree of mercurial action, but not to the extent of salivation, or evident soreness of the gums, one blue pill should be given morning and evening. If this acts upon the bowels, a quarter of a grain of opium may be added to each pill. In exciting salivation two blue pills are about equivalent to a one grain calomel pill.

## BORAX

Is soluble in water, has a cooling taste, and is decomposed by several of the acids. It is rarely used internally, although it is supposed by some writers to possess considerable activity as a diuretic. Borax is more generally used as a gargle for sore mouths, in combination with sage tea and honey. It is also applied in powder to aphthous sores in the mouths of children, mixed with an equal proportion of pulverized white sugar.

BONE SET.—*Thorough Wort, or Indian Sage.*

This medicine acts powerfully as an emetic, sudorific, and tonic, and has been found highly serviceable in intermittents and other fevers. Every part of the plant may be used, though the flowers appear to possess the greatest activity. The decoction is the most convenient form for its exhibition; this administered when warm, acts as an emetic, and determines to the skin,

producing free perspiration; but when given cold, it acts as a powerful tonic. Dr. Anderson details a number of cases of intermittent fever, which after evacuations had been premised, were radically cured by the thorough wort. It was given in decoction, or in powder, in doses of twenty or thirty grains, every second hour during the intermission.

#### BROWN MIXTURE.

This preparation is calculated particularly for the chronic affections of the breast, to which aged people are often liable. It will, however, to persons of all ages, be found useful, where there is a huskiness, hoarseness, and a soreness of the breast and throat. It contains pretty much the amount of a prescription formerly recommended by the late Professor Barton, of the Pennsylvania University. The articles are to be put into a mortar in the order in which they stand, and should be gradually rubbed together, commencing with the two first, and then adding one at a time:

Take powdered liquorice, an ounce and a half; powdered gum arabic, six drams; elixir pargoric, an ounce; sweet spirits of nitre, an ounce and a half; antimonial wine, four drams; proof spirits, one ounce; water, six ounces; to be shaken before used. Dose—a small table spoonful every three or four hours, or whenever the cough is particularly troublesome.

#### BLOOD ROOT.—*Puccoon, or Indian Paint.*

This plant which is well known in almost every part of the United States, taken internally in moderate doses, excites the activity of the circulation, the power of absorption, increases the appetite, and promotes digestion. In larger doses, it depresses the power of the circulation, produces nausea, and sometimes vomiting. When excessive doses are administered, it vomits with violence, produces heart-burn, faintness, dizziness, imperfect vision, and great prostration of strength. Indian paint is emetic, diaphoretic, and stimulant. It may be given in powder, infusion, or the saturated tincture. The infusion should be prepared by pouring a pint of boiling water on an ounce of the root coarsely powdered. The tincture may be made by digesting two ounces of the root in a pint of proof spirit. To produce vomiting, the powdered root may be given in doses of from ten to twelve grains. The infusion in doses of from one to two table spoonful, and the tincture in doses of from thirty to sixty drops.

Experimental tests of Dr. Dexter, corroborated by those of other respectable physicians, show that this medicine possesses very active powers. One grain of the powdered root, or ten drops of the saturated tincture, often proves stimulant and diaphoretic. Dr. Allen and others have used this medicine as a substitute for the foxglove in coughs and other pulmonary complaints, and suppose it to be equally efficacious and less debilitating than that article. As the strength of this, as well as of most other vegetable productions, is often materially altered by keeping and other causes, it will be necessary, if the doses above recommended prove inefficacious, to increase and repeat them as often as the nature of the case demands.

#### CANELLA ALBA, OR WILD CINNAMON.

This is the interior bark of a tall tree growing in the West India islands. It is heating, pungent, and aromatic. It is often used where the stomach requires some warm stimulant. It may also be used to cover the taste of some more ungrateful medicines. Dose of the powder, from ten to twenty grains.



## CASTOR OIL

Is a mild evacuant, operating without griping or harshness, and suited to most cases where the bowels are to be gently opened; yet it is not efficient in severe costiveness, or where the bowels are to be powerfully acted upon. Dose for an adult one ounce, or more; for an infant a tea spoonful. As it is an exceedingly unpleasant medicine, various plans have been proposed for its administration, but perhaps there is none better than by pouring it on a little sugar and water, to prevent its adhering to the glass, and both before and after rinsing the mouth with whiskey or brandy.

## CHAMOMILE FLOWERS.

The odour of these flowers is strong and fragrant, the taste bitter and aromatic, with a slight degree of warmth. The active principles of the flowers may be taken up by water and alcohol. Hot water should be used in making an infusion, but boiling dissipates the essential oil, on which account the chamomile flowers should never be given in decoction.

The flowers are rarely used in substance. Externally they are sometimes applied as fomentations, after being infused in hot vinegar. A warm infusion of the flowers may be given internally to excite sweating and aid in the operation of emetics. A strong infusion given, when cold, in doses of a wine glassful several times a day, will be found an excellent tonic.

## CLOVES.

The clove is accounted the hottest and most acrid of the aromatics, and acts as a powerful stimulant to the animal fibres. This article enters into many medical preparations. In cases of palsy, &c. it supersedes most others of the aromatic class.

## COLUMBO ROOT.

The bark of this is wrinkled and thick, of a dark brown colour externally, and of a bright yellow internally; smell, slightly aromatic; taste somewhat acrid, and unpleasantly bitter. This root is a powerful tonic, and commonly used in infusion in combination with the other vegetable bitters. When, however, it is given alone, the dose in powder is half a dram, administered repeatedly during the day.

## CARROT.

The roots of this well known plant contain much mucilaginous and saccharine matter. Either boiled or grated raw, they constitute an excellent poultice for ill conditioned ulcers, correcting the disagreeable smell, softening the edges, and often checking excessive suppuration.

## CROTON OIL.

This is a powerful purgative, and operates in a very short time. It is sometimes used in cases of obstinate costiveness, mania, convulsions, apoplexy, &c. It is also used in India as an external application in rheumatic

affections. It is generally administered in doses of from one to five drops, made into pills with the crumbs of bread. It can also be given, rubbed up in the mucilage of gum arabic; some think it safest in this form. The stools produced are watery and copious. One, two, or three drops often operate powerfully, and yet it cannot be denied that in some instances much larger doses have been given without effect. Croton oil is one of those articles which require particular caution in their administration.

#### CHARCOAL.

This article is not entirely free from hydrogen, as it is commonly prepared, but may be purified by exposing it for some time to a strong heat. A table spoonful of powdered charcoal, taken thrice daily in syrup, is said to remove habitual costiveness; taken in doses of ten or fifteen grains, five or six times daily, it corrects the foetid smell of stools in dysentery and other complaints: it has also been used in intermittent fevers; it allays sickness at the stomach, promotes appetite, and assists digestion; as a tooth powder, its value is well known. Its use in gangrene or mortification, as an external application, has already been mentioned under the article "*Mortification*," which see.

#### ACACIA CATECHU.

This is a powerful astringent, and useful particularly in languid ulcerations in the mouth and about the fauces, also for aphthæ; in these cases it should be suffered to dissolve leisurely in the mouth. One of the best forms in which it can be exhibited in cases of diarrhœa, &c. is that of simple infusion in warm water, with a proportion of cinnamon. It also forms an excellent tooth powder with equal proportions of Peruvian bark. Dose in powder, from ten to twenty grains or more.

#### BALSAM COPAIVA.

This medicine is chiefly used in gonorrhœa and other diseases, especially ulcerations, affecting the urinary organs. (*See the article "Gonorrhœa."*) Dose to commence with, twenty drops twice a day on loaf sugar.

Balsam copaiva is sometimes given in smaller doses of five or eight drops, as an expectorant in chronic affections of the breast.

#### CASCARILLA BARK.

This bark has a light agreeable smell, and a moderately bitter taste, accompanied with a considerable aromatic warmth. It is an excellent tonic, astringent, and stomachic; it is also considered particularly useful in flatulency, dyspepsia, asthma, and dysentery; it is not unfrequently combined with the Peruvian bark. The dose of the cascarilla is from fifteen grains to half a dram three or four times a day.

#### CAMPHOR.

This is obtained from the wood of a tree by distillation. Camphor, when taken into the stomach, increases the heat of the body and excites sweating, but does not quicken the pulse. In excessive doses it causes fainting, convulsions, and delirium. These bad effects are best counteracted by opium. Camphor, especially when combined with opium, has a tendency to induce sleep—indeed, it often succeeds in removing spasms and the like, when

opium fails. Internally it may be given in substance, in doses of from three to ten grains, repeated every two hours, as its effects are transient. It can be taken also conveniently when well rubbed up with milk or a little alcohol: it will not remain suspended in water.

#### CASTOR.

This is an animal substance obtained from the beaver. It has a peculiar narcotic smell, and a nauseous, acrid taste. Castor has long been considered an excellent antispasmodic; it is but little heating, and acts particularly upon the uterine system. It is mostly given in hysterical and hypochondriacal affections, and convulsive diseases. The dose is from ten to thirty grains in substance; in clysters, a dram may be given. Diluted alcohol extracts its virtues.

#### PREPARED CHALK, OR PREPARED CARBONATE OF LIME.

This is an absorbent and antacid earth, that is, it combines with and neutralizes most acids. It is useful especially after calcined magnesia has been used, when the contents of the stomach and bowels are in an acid state, which often causes unpleasant diarrhœa, besides impairing digestion and assimilation. When applied to burns or ulcers, it imbibes the ichorous matter, and keeps the parts clean and free from abrasion. It is generally used internally in combination with other articles, as calomel, opium, &c. It is best given in small doses of from five to ten grains, frequently repeated.

#### LUNAR CAUSTIC.—*Nitrate of Silver.*

Internally taken, this article has been recommended in epilepsy and other diseases. It has been considered as a tonic and antispasmodic. Dr. Coxe, however, is of opinion that its virtues, as an internal remedy, have been exaggerated. It is much and deservedly esteemed as an external application to fungous excrescences, callous ulcers, fistulas, strictures in the urethra, &c. &c. In these cases it acts as a caustic or escharotic.

A small piece of the caustic should be inserted into the end of a quill; with this moistened, the part which the operator wishes to act upon should be slightly touched. The caustic and quill, after using, should be wiped dry, and kept in a vial well corked, so as to prevent the access of atmospheric air, which has a tendency to decompose it.

#### CREAM OF TARTAR, OR SUPER-TARTRATE OF POTASH.

This, either given alone, or in combination with sulphur, will be found an excellent laxative. The dose, when mixed with equal proportions of sulphur, is a table spoonful several times a day; this can conveniently be given in molasses.

#### CAMPHORATED SPIRITS.

This alcoholic solution of camphor is only employed for external uses, for the relief of rheumatic pains, paralytic numbness, for discussing tumours, and for stimulating the nostrils, in fainting. The proportions of camphor and alcohol to be used in this preparation, are one ounce of the former to a pint of the latter.

## CALOMEL, OR MILD SUB-MURIATE OF MERCURY.

This is the most useful preparation of mercury we possess, and it may be considered as possessing, according to the manner in which it is used, various medicinal qualities. In large doses, from twelve to thirty grains, it operates as a cathartic; when combined with opium, or given so as not to cause purging, it excites salivation; in smaller doses it is an alterative; it also possesses sudorific and diuretic qualities. Calomel should be administered in the form of pills, or mixed with syrup or molasses; if attempted to be given in water, tea, or the like, it will, from its weight and insolubility, sink to the bottom.

## CORROSIVE SUBLIMATE,

Formerly called the oxy muriate of mercury, is a violent poison. It acts externally as a caustic, but even its external application should be resorted to with caution; in some cases of obstinate eruptions, its use has been attended with success. Dose internally, one eighth to the fourth of a grain; sometimes it is useful in cases of secondary syphilis; when it is administered, mucilaginous drinks should be used. When an over-dose has been taken, the white of an egg diluted with water, and wheat flour and water, are the best antidotes.

## COXE'S HIVE SYRUP.

This very excellent preparation is made by taking seneca snake-root and dried squills bruised, of each half a pound, water eight pounds, boil them over a slow fire until half the water is consumed, then strain off the liquor, and add to it four pounds of honey. Boil this mixture to six pounds, and to every pound of the syrup thus made, add sixteen grains of tartar emetic, that is, one grain to the ounce. The dose is from ten drops to one or more tea spoonful every quarter, half, or one hour, according to the age of the patient, and the violence of the disease. This preparation is of considerable efficacy in croup and whooping cough.

## CARBONATE, OR RUST OF IRON.

This is given in cases of general debility with very great advantage. It is commonly given in powder, in doses of from ten to thirty grains. When it is administered simply to increase the tone of the stomach, some aromatic, such as ginger, may with propriety be added.

## COPPERAS, GREEN VITRIOL, OR SULPHATE OF IRON.

The tonic power of this article is considerable, though it possesses no advantage over the preceding article, except that smaller doses are required to produce the same effect. It is directed alone, or in conjunction with the bark or other bitter tonics. Dose, one to three grains.

## DEWBERRY.

The bark of the root of this plant is astringent, and has of late been resorted to with advantage in the declining stages of dysentery, and in the summer complaint of children. It may be given in decoction, or infusion.



## DOVER'S POWDERS.

Take of ipecacuanha, and powdered opium, each one dram; vitriolated tartar, pulverized, one ounce; the whole to be rubbed with the greatest care, until completed. This is one of the most efficacious sudorifics we possess. In chronic rheumatism it is often found of the greatest service. The dose for an adult is ten or fifteen grains every three or four hours.

## DOGWOOD.

The bark of this tree is tonic and astringent, and has been advantageously used in intermittent fevers. It may be given in decoction, in quantities to suit the nature of the case. The active principle has very recently been extracted, and will probably, in time, supersede the necessity of importing the Peruvian bark, than which in many cases, it is not less efficacious. It is very common to unite the wild cherry tree bark with the dog wood, in decoction.

## DANDELION.

This plant is very common in uncultivated fields. It contains a bitter milky juice, which, however, is more abundant in the root before the flower stem shoots. The bitterness is destroyed by drying—hence only the recent full grown root should be used.

The properties of this weed are of a diuretic character; it may be given in the form of expressed juice, or a decoction made by boiling one ounce of the sliced root in a pint of water down to a half pint; then adding to the strained liquor one dram of cream of tartar. Dose, three or four table spoonsful, twice or thrice a day.

## ETHER.

When internally administered, ether is antispasmodic, cordial and stimulant. In low fevers, and all nervous disorders, it possesses a considerable share of reputation. Externally it relieves the head-ach, tooth-ach, and other painful affections. When applied to the surface it is capable, by different management, of producing very opposite effects. If when placed on the surface, it is covered by the hand so as to prevent evaporation, it will create considerable heat and redness, with a sensation of burning heat; but if it be simply dropped on the skin, and by open exposure to the air permitted to evaporate, it produces an intense degree of cold, and a proportionate diminution in the size of the part to which it is applied. For this purpose it is sometimes used in cases of strangulated rupture. Dose to produce an antispasmodic, cordial, or stimulant effect—from a half up to two fluid drams. This should be frequently repeated.

## ELIXIR OF VITRIOL.

In general weakness, relaxation of the stomach, and in constitutions injured by disease, or irregularities in the mode of living, this medicine has been found highly serviceable. It has indeed succeeded, after vegetable bitters and aromatics by themselves have entirely failed of accomplishing

the desired object. It may be conjoined with the Peruvian bark, and other tonic bitters; and not only does it tend to cover their unpleasant taste, but adds essentially to their specific virtue. It may be given in doses of from ten to thirty drops three times a day. If possible, the acid should be prevented from coming in contact with the teeth; it will therefore be proper to suck it, properly diluted, from the glass, through a quill.

As we have spoken of combining elixir of vitriol with other tonics, it occurs here to state, that we are not unmindful of a very valuable observation made by Professor Chapman, of Philadelphia, and which applies to tonics equally with stimulant medicines: he says "by directing stimulating remedies *separately*, we shall economize our resources in many lingering diseases." By this means we can so provide, that the system may not lose its susceptibility by the constant impression of the same stimulus.

#### EYE WATERS.

Dissolve one scruple of sugar of lead in half a pint of pure water. It is occasionally advisable to rub in a mortar, five grains of solid opium with the above mixture, which should then be strained, as the opium will not entirely dissolve.

This is a very useful application when the eyes are in a highly inflamed state. A little of this preparation should be dropped into the eye five or six times a day.

In cases of chronic or less active inflammation, the following prescription will be found useful: take of white vitriol, twelve grains; sugar of lead, fourteen grains; pure water, half a pint—dissolve and pour off the clean liquid. This should be used precisely as the former prescription.

Where this does not excite a temporary smarting sensation, the twelve grains of white vitriol, alone may be dissolved in a half pint of water, and used as is above directed.

The strength of eye waters will, however, have to be varied repeatedly in practice.

#### ELDER.

The berries of this tree have a sweetish, and not unpleasant taste; though when eaten to any amount they offend the stomach.

The expressed juice *inspissated*, or thickened to the consistence of a jelly, proves a valuable laxative medicine. The inner green bark of the trunk is gently cathartic; an infusion of it, or the expressed juice, in the dose of half an ounce or an ounce, is said to purge moderately; and in smaller doses, it appears capable of promoting all the fluid secretions.

The young leaf-buds are so actively purgative as to be accounted unsafe;—the flowers of the tree, on the contrary, possess very different qualities; they have an agreeable aromatic flavour, which they yield in distillation with water, and impart to vinous or spirituous liquors by infusion.

#### SLIPPERY ELM.

The inner bark of this tree, is the part used for medicinal purposes. By infusion in water it affords a thick mucilaginous substance, applicable to a variety of complaints. It may be freely drank in catarrhs, pleurisies, &c. and may even serve for food in some highly inflammatory diseases. As an application to ulcers, gun shot, and other wounds, a poultice made of the inner bark has been found superior to that of the bread and milk.

## ESSENCE OF MUSTARD.

Take of spirits of turpentine, one pint; camphor, one ounce; mustard and oil of sweet marjoram of each half an ounce—mix them. This mixture has, occasionally, been found useful in chronic rheumatic affections. The parts affected should be frequently rubbed with it, and kept warm by being wrapped up in flannel.

## ESSENCE OF PEPPERMINT.

Take rectified spirits of wine, one pint; put into it prepared potash, one ounce, previously heated—decant and add oil of peppermint, half an ounce.

## EPSOM SALTS, OR SULPHAT OF MAGNESIA.

This salt is found in considerable quantities in some parts of Tennessee. It is also procured from several mineral springs, and from the sea water. If perfectly pure, when exposed to the air, it falls into a white powder. It is a mild, though effectual purgative, rarely occasioning griping in the bowels, or sickness. Dose, one ounce dissolved in a sufficiency of common water.

FLAX SEED.—*Linseed.*

This very useful article contains one fifth mucilage, and one sixth fixed oil. The oil may be procured by expression, but it is unfit for internal use. The seeds pounded and infused in hot water, make an excellent pectoral drink in catarrhs and pleurisies.

When a difficult and painful sensation exists in making water, this infusion may be drank freely with considerable relief to the distressing symptoms. Externally, the pounded seeds may be applied as a poultice to felons, and to all affections where it is desirable to induce suppuration, and to determine the matter to the surface. Indeed it is a useful substitute for the common bread and milk poultice.

## FOX GLOVE, OR DIGITALIS.

When considering the qualities of the fox glove, the hemlock, and some other medical agents, we have reason to regret the extravagant encomiums bestowed on them when first brought into notice by enthusiastic and credulous projectors or copyists; for this very conduct has had a tendency to banish from practice, medicines truly worthy of credit, when properly used.

The digitalis, of all narcotics, diminishes most powerfully the action of the pulse, and that without a previous excitement. In excessive doses it causes vomiting; purging; dimness of sight; delirium; convulsions and death.—The best remedies are cordials and stimulants.

This article has been recommended in a variety of diseases: such as epilepsy, insanity, &c. but more particularly in consumption. It must appear evident that whatever diminishes arterial action, has a tendency to relieve the lungs in that task which, whilst diseased, they can but illy perform; as a diuretic, also, digitalis has been considerably used in dropsy.

The powdered leaves in substance, and the tincture of this article, are the most convenient forms in which it can be exhibited. The dose of the leaves with which to commence, is one grain twice a day; the quantity should be

gradually increased until it acts upon the kidneys, stomach, bowels, or pulse, when the use of the article should be suspended.

The tincture is prepared by putting one ounce of the dried leaves into four ounces of diluted alcohol; this should stand by the fire twenty four hours, and during that time it ought to be frequently shaken; it should then be filtered. Dose—to commence with, fifteen drops twice or thrice a day.

The administration of this medicine requires to be conducted with great caution. Its effects do not immediately appear; and when the doses are too frequent, or too rapidly augmented, its action is concentrated so as often to produce the most violent symptoms.

Medical writers have observed a singular circumstance attending the action of the fox glove on the pulse; this is, that it is considerably influenced by the position of the patient's body. In one case of consumption the pulse was not lessened in frequency when the patient stood erect—being 120; when he sat down it fell to 70, and when lying on his back it fell to 40. The experiment was often repeated, and with the same success.

#### GAMBOGE.

When given in doses sufficiently large, it is simultaneously emetic and cathartic, though it is most commonly given with other medicines to produce the latter effect. Combined with calomel, jalap, and aloes, it is a powerful evacuant of bile; in some cases of bilious fever, therefore, it is preferable to any other cathartic medicine. The ordinary dose of gamboge is two or three grains, repeated at short intervals where active purging is required.

#### GARLIC.

This article, applied to the surface of the body, stimulates, increases the heat of the part, and sometimes occasions a blister. It has a tendency also to discuss indolent tumors.

For external use the garlic may be bruised in a mortar with strong vinegar; then spread on a rag and applied as a poultice. It is often a useful substitute for mustard plasters.

When taken internally as a condiment in moderate quantities, it imparts an agreeable sensation of warmth, and improves digestion. As an internal medicine, the expressed juice is mostly used: it is often stewed with molasses, and taken at bed-time for bad colds. It is certainly a warm, strengthening medicine, and should not be used where there is febrile action. An infusion in vinegar and water has been recommended in dropsy, and also in typhus fever. In deafness, cotton moistened with the juice may be introduced into the ear five or six times a day. After taking it internally, the disagreeable odour of the breath is in a great measure removed by chewing parsley leaves.

#### GUM GUAIAECUM.

Taken internally, this gum creates a sense of warmth in the stomach, and a dryness in the mouth, with thirst. It increases the heat of the body, and quickens the circulation. If the patient be kept warm and quiet it also induces perspiration. If on the contrary, he is exposed to the air, it causes an increased flow of urine. In large doses it is purgative. In gout and rheumatism, benefit has been derived from a decoction of the wood, or the gum resin made into pills. The decoction may be taken without very particular restrictions as regards the dose. The gum resin should be used in doses of twenty grains, two or three times a day. The tincture of Guaiacum is often



used with advantage. The dose for an adult is half an ounce, three or four times a day, combined with a gill of water. The patient should be careful to keep warm.

#### GODFREY'S CORDIAL.

In six pints of hot water, infuse nine ounces of sassafras; of caraway, coriander, and anniseed, each one dram: simmer the mixture until it is reduced to four pints; then add of molasses four pints, and boil the whole for a few minutes. When cold, three drams of laudanum may be added to the mixture.

#### GINGER.

This root has a fragrant smell, and a hot, pungent, aromatic taste. In flatulent colics, dyspepsia, and gout, it is a very useful spice; and in a debilitated states of the intestines, combined with other medicines calculated to impart tone, it has been found highly serviceable. The dose in powder is from ten to twenty grains. It may be drank as a beverage in the form of beer, made by taking of lump sugar half a pound, of cream of tartar, half an ounce; powdered ginger, an ounce, and adding one gallon of boiling water. The mixture should then be permitted to ferment with yeast for twenty-four hours.

#### GARGLES.

These are frequently used with advantage in ulcerations and other affections of the mouth and throat. Various kinds of gargles, as stimulating, emollient, and anodyne, are at different times necessary.

A very common and useful detergent or cleansing gargle is thus made:—take half a pint of strong sage tea, a table spoonful of vinegar, a dram of saltpetre, and two table spoonsful of honey; mix the articles together, and use the preparation occasionally.

The borax gargle is often useful in apthous affections of the mouth. Take of borax, two drams; flaxseed tea, six ounces; honey one ounce.

Cayenne pepper is often beneficial in gargles. Dr. Chapman recommends the following prescription for sore throat: take of Cayenne pepper, one ounce; common salt, one dram and a half; boiling water and vinegar, each half a pint.

Where mild astringents are indicated, take of flaxseed tea, twelve ounces; honey, two ounces; elixir of vitriol, half a dram.

Another excellent detergent and astringent gargle may be made as follows: take of sage tea, half a pint; vinegar and honey, each two ounces; tincture of myrrh, an ounce.

#### GLYSTERS OR INJECTIONS.

Glysters are very useful in a great variety of diseases; the principal objects of their administration are to allay pain and irritation, particularly when anodynes cannot be retained in the stomach; and to aid the cathartic operation of medicines taken by the mouth. Sometimes, also, they are used with a view of exciting nausea.

To effect these purposes, various glysters have been recommended. When our object is simply to alleviate pain, and opiates cannot be retained by the stomach, anodyne glysters will often be found most essentially ser-

viceable; these may be composed of a proportion of laudanum suited to the age of the patient, in combination with a gill of any mucilage; as the starch, flaxseed, or barley water. As a general rule, two or three times as much laudanum may be safely thus given, as by the mouth; and as twenty-five drops is the average dose for an adult, seventy-five may be administered as a clyster. To children, proportionate quantities should be given.

When we exhibit clysters with a view to their evacuating influence, they should be more or less stimulating, according to the nature of the case. If a simple laxative effect is required, one pint of warm barley water or flaxseed tea may be administered; if a more powerful action is required, take of barley water or flaxseed tea, from one to two pints; castor or sweet oil, two or three ounces; glauher or epsom salts, two table spoonsful; mix them. Or if something still more stimulating is required, take spirits of turpentine, half an ounce; the yolk of an egg, and flaxseed tea, or a solution of gum arabic, ten ounces. Rub the turpentine with the yolk of the egg, until they are perfectly incorporated, and add the flaxseed tea or the solution of gum arabic.

To produce nausea and relaxation of the muscles, the tobacco injection is occasionally resorted to. This is made by infusing one dram of the leaves, in a pint of hot water, and one third of the infusion given every hour or two, until the desired effect is produced. This is, however, often attended with very dangerous consequences, and should only be resorted to where it is absolutely necessary, as in some cases of strangulated ruptures, &c.

As a less dangerous remedy, the smoke of tobacco is sometimes injected through a common clay pipe, as recommended in one of the preceding pages, under the head of "Painters Colic."

#### GENTIAN ROOT.

This is, externally, of a brown colour, and wrinkled; but internally, of a spongy consistency, and yellowish hue. It has no smell, but in bitterness surpasses all other vegetables. Gentian is an excellent tonic and stomachic bitter, and in general or local debility may be given in an infusion—two drams to the pint of water, in the dose of a wine glassfull twice or three times a day. It may also be given in substance, in doses of from ten to sixty grains.

#### GLAUBER'S SALTS.

This preparation of soda is generally procured as the result of various manufactures. The taste is at first salt, and afterwards unpleasantly bitter. Exposed to the air, this, like the Epsom salts, falls into a fine white powder, of half its original bulk. For armies, and for domestic use, this would probably be the best mode of keeping it, as to produce a purgative effect, only one half of the usual dose need be given.

The Glauber's salt, in its crystalline form, may be taken in doses of an ounce to an ounce and a half, to produce purging; in smaller doses, largely diluted, it is serviceable as a diuretic and gentle laxative.

#### GALL-NUT.

These excrescences, which appear on the boughs of the oak tree, are nearly round, smooth on the surface, but studded with tuberosities. They are very brittle, and break when dry with a flinty fracture. The taste is exceedingly bitter and astringent. The active principle can be taken up by water.

In preparing the gall-nut, they should be dried in air of a very moderate temperature, as too much heat will destroy their efficacy. They are most powerfully astringent, and as a tonic remedy they have been given in intermittent fevers; they form powerful injections for constringing relaxed parts, for which purpose two drams of the bruised or powdered gall-nut may be infused for some time in a pint of boiling water. Dose internally, is from ten to twenty grains.

#### HONEY.

This is an excellent article of food, although in some constitutions it causes griping and colic pains; it is also used in various forms in medical practice. It is administered frequently in gargles, and as an emollient and detergent application to ulcers.

#### HEATING PLASTER.

Take of blistering blaster (such as is purchased at the shops) one part, Burgundy pitch seven parts, melt them together with a moderate heat, and make them into a plaster. This spread on linen may be worn for several days; it will scarcely ever raise a blister, and is more stimulant than a Burgundy pitch plaster.

In treating of colds, pages 193 and 194, the simple Burgundy pitch plaster is recommended on the authority of Dr. Buchan. We, however, reviewing what has been written on the subject, feel disposed to advise the addition of the heating plaster, as it certainly renders the application more active. If this causes a very unpleasant itching between the shoulders, it may be applied on the breast.

#### HOPS.

Hops are intensely bitter, aromatic, and astringent. An infusion of this article forms an agreeable bitter in enfeebled states of the stomach. As an anodyne also, it may be substituted for opium: it is particularly beneficial to those whose constitutions and digestive faculties particularly, have been injured by intemperance. As a tonic, the infusion is preferable, and as an anodyne the tincture. The former may be taken in doses of a large wine glassful, and the latter in doses of a tea spoonful, to be repeated and increased as the occasion may require. We have already noticed this article in treating of cancer.

#### HEMLOCK.—*Cicuta*.

This vegetable possesses narcotic and acrid qualities in an eminent degree; indeed the whole plant is a virulent poison. When an over-dose is taken it produces dimness of sight, giddiness, nausea, anxiety, trembling, and paralysis. In small and moderate doses, however, this article can be taken with perfect safety; indeed, when administered with any degree of prudence, its sensible effects will always be evident in time to prevent any serious danger. We have spoken of this article when treating of scirrhus and cancer. The dose, either of the extract or powdered leaves, should be, at the commencement, about three grains a day, in one grain doses; this quantity has been gradually increased to two ounces a day without producing giddiness.

Some physicians suppose, that in administering this medicine, little ad-

vantage can be gained, except by exhibiting and continuing the use of the greatest quantity that the patient can bear.

In scrofulous affections, the extract and dried leaves of the hemlock have been much used; an extract from the seeds is said to be stronger than that from the leaves.

#### PRIDE OF INDIA.

This tree grows and flourishes in South Carolina and Georgia. Professor Barton describes it as one of the most valuable vernifuges known. Dr Kollock of Savannah also recommended it highly.

Four ounces of the bark of the fresh root should be boiled in a quart of water, until it is reduced to about a pint, of which from half an ounce to an ounce may be given every two or three hours until it operates. Sometimes it both vomits and purges; the dried berries have been used in South Carolina, children being allowed to eat them at pleasure.

#### ICE.

The excessive and imprudent consumption of ice in drinks, during the summer season, is often injurious, but we doubt not of its utility when used discreetly.

As an external application, it has been recommended in various diseases, especially for inflammation of the brain. A recent newspaper informs that it has proved successful in cases of yellow fever in the island of Cuba. How far such a mode of practice may be likely to prove beneficial we pretend not here to say, but are under the impression that the subject is well worthy of attention. Immersing the patient in baths of iced water, while laboring under all the violence of fever, is not a new practice; indeed, it is stated that many practitioners in hot climates resort fearlessly and successfully to this plan of treatment, three and even four times a day.

#### IPECACUANHA.

This root in large doses is an emetic, and in smaller ones diaphoretic and expectorant, especially when combined with opium, (*see Dover's powder*;) it is a powerful agent in restoring and keeping up the perspiration. This renders it a valuable medicine in dysentery, &c.

As an emetic, in all cases where the stomach is irritable or debilitated, ipecacuanha is decidedly the best. It is less apt to pass off by the bowels than antimonial emetics. The medium dose in powder to cause puking is about twenty grains. Warm water or other diluents should be drank plentifully to assist the evacuation. Dr. Hartshorne, of Philadelphia, states, that a portion of powdered gum arabic, combined with the dose, removes the nauseating taste; this, in some cases, is a matter of considerable importance. In nauseating doses, owing to the sickness lessening the force of the circulation, it is employed with success in hemorrhages from the lungs, womb, &c. A decoction of the root of ipecacuanha has been used as an injection in dysentery with great success. Dr. Clark directs three drams of the bruised root to be boiled in a quart of water down to a pint, strained and administered at once, to be repeated if necessary. In cases of internal piles, half the quantity used in the same manner, is strongly recommended.

In cases of *Hernia* or rupture, emetics are contra-indicated, also when there is an increased determination of blood towards the head, and in the low stages of nervous or typhus fevers.



INDIAN TOBACCO.—*Lobelia Inflata*.

This article was employed by the aborigines as an emetic, also by those quacks who affected to deal in Indian remedies only. It is one of the most powerful and deleterious substances known, and should not be used but with the utmost caution. Even horses and cattle have been supposed to be killed by eating of this article accidentally. It is a subject of regret that the medical qualities of this highly active plant have not been exactly ascertained. The leaves should be gathered in August, when the plant is in blossom, and carefully dried and preserved for use. From ten to twenty grains of the powdered leaves will generally operate as an emetic: of the tincture, twenty, forty, or even sixty drops, may be safely given to children of one or two years old. As a pectoral, it may be given in powder or pills alone, in small doses.

## JALAP

Has a nauseous smell and taste, and when swallowed it affects the throat with an unpleasant sense of heat. When powdered, it has a yellowish grey colour.

Jalap, in doses of from half a dram to a dram, of itself, proves cathartic, though it is most frequently given in combination with calomel; fifteen grains of each will generally prove sufficiently effectual. Jalap and cream of tartar also constitute an excellent purge on many occasions.

## JAMES' POWDER.

This combination of oxyde of antimony with phosphate of lime, which can only be prepared by a chemical process and the aid of heat, is one of the best antimonials we possess. It is given, especially in fevers, to induce a discharge by the pores of the skin; in large doses it operates as a puke or purge. The dose, with a view to its sudorific effects, is from three to eight grains every three or four hours. It will not dissolve in water, and must therefore be given in the form of a powder or pill.

## JUNIPER BERRIES.

These are the product of an evergreen shrub growing on hilly grounds. They have a strong, though not unpleasant smell, and a warm pungent taste. To an essential oil they are indebted for their stimulating, diaphoretic, and diuretic properties. To produce these effects, infusions of the berries in boiling water, when cool, are freely used. Essential oil of juniper berries communicates diuretic qualities to gin.

JERUSALEM OAK.—*Worm Seed*.

This is a native of the United States, and is very abundantly found in various parts; it is esteemed a powerful remedy for worms.

The plant has a strong unpleasant odour, of which it is very retentive; the taste is acrid, bitter, and exceedingly unpleasant. When worms are present, it may be exhibited several days in succession, and then followed by some strong cathartic. The modes of exhibition are various: a decoction made by boiling one ounce of the plant in a pint of water or milk may be

used in the dose of two table spoonsful twice or three times a day. The simple expressed juice of the plant is another form in which it may be given. the dose of this is from one to two table spoonsful. The seeds may be given in substance mixed with molasses, or the essential oil of the plant may be used. The dose of the former is a table spoonful morning and evening, and of the latter, five to ten drops.

The above doses may be administered to children between the ages of two and four, or five years; for younger, less will be required; to adults larger portions should be given.

#### GUM KINO.

. This, like catechu, is a powerful astringent. It is employed in diarrhœa, dysenteries, hæmorrhage, fluor albus, &c. Alkaline substances, and strong acids, destroy its astringent qualities. The dose in substance is from twenty to thirty grains. It is often used in tincture and infusion; one, two, or even three tea spoonsful of the tincture may be given at a dose.

#### COMPOUND PLASTER OF LITHARGE.

Take of litharge plaster three pounds, strained galbanum eight ounces, turpentine ten drams, frankincense three ounces. The galbanum and turpentine being melted, mix with them the powdered frankincense, and afterwards the litharge plaster, melted also with a very slow fire; and of the mixture make a plaster.

In superficial inflammations, except those of an erysepatous kind, and in hard tumours of the breast and other glandular parts, attended with a sense of soreness; this plaster may be worn with very great advantage.

#### LOGWOOD.

This wood is firm, heavy, and of a dark red colour; its taste is sweet, with a slight degree of astringency. The principal use of this article is as a dye-wood, though on account of its astringent principles it may be useful in obstinate diarrhœas, and in chronic dysentery. The mode of administration is in a decoction, made by boiling two ounces of the wood in two pints of water until the liquid is reduced one half: the dose of this is a table spoonful every two or three hours.

#### LAUDANUM.

Laudanum, or the tincture of opium, is made by pouring on two ounces of powdered opium in a bottle, two pints of diluted alcohol; this should be shaken daily for ten days, and then is fit for use. Twenty-five drops of laudanum are considered as equivalent to one grain of opium.

The dose of this article should be accurately proportioned to the age of the patient. Half a drop may be safely given to a child under ten days old, and may be exhibited by pouring one drop into two tea spoonsful of water, one of which should be administered. From the tenth day until the end of the month, one drop may be given; a drop and a half or two drops, from one to three months; three drops from three to nine months; four drops from nine to eighteen months; and from this period up to the fourth year, five or six drops may be given. After this, for every succeeding year, a drop or two may be added. The dose for an adult is from twenty-five to thirty drops.

As laudanum is frequently given by injection, it may be proper to state,

that as a general principle, when thus administered, three times as much will be required to produce an anodyne effect, as when given by the mouth. Thus for an adult, as the usual dose by the mouth is from twenty-five to thirty drops, for an injection from seventy-five to ninety will be required.

#### LIP SALVE.

Take of white wax four drams, good sweet oil five drams, spermaceti half a dram, and oil of lavender five or six drops. These may be melted together, and then permitted to cool for use.

#### LIQUORICE.

The roots of this plant contain a great quantity of saccharine matter; combined with some mucilage, hence it has a viscid sweetish taste. The root, or the extract of the root, is in common use as a constituent of pectoral mixtures for coughs, hoarseness, and incipient pulmonary affections. It is also useful to conceal the taste of more unpleasant medicines.

#### LIME WATER.

Take of lime half a pound, boiling water twelve pints, pour the water on the lime, and stir them together; next cover the vessel immediately, and let it stand for three hours. After this, the fluid should be kept standing in closely stopped glass bottles, upon the undissolved lime. The clear liquor may be poured off for use. It may be given internally in doses of two ounces or more, in all cases where acidity exists in the stomach. It may be either given alone or combined with milk; mixed with sweet oil, it may be applied externally to burns and scalds.

#### LAVENDER, COMPOUND SPIRITS OF.

This is a grateful cordial and stomachic, occasionally useful in debilitated states of the stomach. Dose, from a tea spoonful to a table spoonful, diluted with water.

#### LEE'S NEW-LONDON ANTIBILIOUS PILLS.

Take of powdered aloes twelve ounces, powdered scammony six ounces, powdered gamboge four ounces, powdered jalap three ounces, calomel five ounces, castile soap one ounce, syrup of buckthorn\* one ounce, mucilage of gum arabic seven ounces; mix the above into a mass, and when incorporated, divide two drams of the mass into twenty-four pills.

#### LITHARGE PLASTER.

Take of litharge in very fine powder five pounds, olive oil a gallon, water two pints; boil them with a slow fire, continually stirring, until the oil and

\* Buckthorn berries have been used as a cathartic: the dose is about twenty of the fresh berries in substance; they possess no advantage over many other purgatives, but are offensive, and when taken alone, operate severely, occasioning thirst, &c.

litharge unite so as to form a plaster. This will take some hours. Excoriations, slight burns, and the like, may be covered with this plaster, but it is particularly useful to defend the skin when it has become red from lying a long time in one position. It answers well also to cover any tender part to preserve it from injury.

#### LISBON DIET DRINK.

This compound decoction operates as a diaphoretic, and may be given advantageously in rheumatism and in the secondary form of the venereal disease. To form this compound, take of sarsaparilla sliced and bruised one ounce and a half, guaiacum wood finely chipped, sassafras and liquorice root bruised, each two drams, mezereon one dram, boiling water three pints, simmer, with a gentle heat, the sarsaparilla, guaiacum, and sassafras in the water for six hours, then boil down the mixture to one half, adding towards the end of the boiling the liquorice and the mezereon: after this strain the liquor for use. The dose of this is three or four ounces taken repeatedly during the day.

#### MUSTARD SEED.

These, when chewed, have an acrid, bitterish taste, and when reduced to powder, a pungent smell. They are sometimes swallowed entire, in doses of a table spoonful, to stimulate the stomach in cases of dyspepsia.

The powder of mustard mixed with water or vinegar, is used as a condiment. Strong infusions of it, in water, prove emetic; while weak infusions are used successfully to check vomiting. In moderate doses it acts also as a diuretic and aperient.

It is, however, as an external stimulant that mustard is mostly used, made into a paste with vinegar, and about one third, or one half common flour. It will, when applied to the surface, often remove superficial rheumatism and other pains. Applied to the extremities, it will sometimes succeed in attracting the gout and rheumatism from more dangerous situations.

In applying mustard plasters for any of the above purposes, caution should be taken that they do not remain on too long, as they are apt to destroy the vitality of the part. An half hour or an hour is generally sufficient for them to produce the desired effect.

When applied to the skin of children, mustard plasters should be less strong than those for adults.

In diseases of low action, when stimulants are required to excite the system, these plasters applied to the extremities, in addition to internal remedies, have been found essentially beneficial. In excessive pukings a large plaster applied over the region of the stomach is often singularly efficacious.

In the composition of mustard plasters, it may be proper to observe that the proportion of mustard should depend on its strength and the age of the patient. This must be left to the judgment of the person who has charge of the sick; it is, however, always desirable that considerable irritation should be induced by the application.

#### MALE FERN.

The root of this plant is the part used for medical purposes. When chewed, its taste is somewhat sweet and mucilaginous, becoming after a while astringent and bitter. As a cure for worms, this root has long been used; but as it is almost always combined with some active purgatives, there is great



reason to suppose, that the effect produced should be equally attributed to them, as to the root itself; which now, however, retains but a degree of its former reputation. The internal solid part of the root only is to be powdered, and given in quantities of from one to three drams, to be followed after a few doses, by an active cathartic. If the worms are not then discharged, the same course ought to be repeated.

## MYRRH.

Good myrrh is of a yellow, or reddish yellow colour; solid and heavy, of a peculiar smell and bitterish taste. As a tonic, it is given in those cases of debility which are supposed to be connected with visceral disease. It has also been given in some cases of suppressed menstrual discharge, and in the ulcerative stage of consumption, as well as in asthma, it has been found beneficial.

As an external application to foul ulcers; in affections of the gums, and in ulcers of the throat, it has also been used. Given as a tonic, it is generally united with bark and the chalybeates. The dose of myrrh, when given in powder, is from ten to sixty grains. It enters, however, most generally, as a constituent of the powders used for the preservation of the teeth and gums.

Equal parts of the tincture of myrrh, tincture of bark, and cinnamon water, to which is added a little gum arabic, will be found an excellent application to the teeth.

A strong tincture of myrrh and Cayenne pepper may be used with benefit by taking a spoonful at a time in the hollow of the hand, and rubbing briskly over joints affected with chronic rheumatism, or the like diseases. A tea spoonful taken into the stomach is a powerful and very diffusible stimulant.

## MANNA.

Is the concrete juice of the manna ash. It is a mild, agreeable laxative, and may be given to children and pregnant women. It is rarely given by itself, but commonly combined with senna, thus forming a very useful purgative. It may also be joined with salts or rhubarb. No particular dose need be specified, as it is not much more cathartic than honey or brown sugar.

## MAY APPLE.

This plant, which is common throughout the United States, is peculiar in possessing several essentially different qualities. The fruit may be eaten, and is thought by some, delicious. The leaves are poisonous, while the powdered root, in doses of twenty grains, is an excellent purgative. It is supposed by some to be particularly adapted as a purge to intermittent, remittent fevers, and dropsies.

## MUSK.

The taste of this article is bitter, and its odour powerful and peculiar. The great value which is attached to it, forbids its general introduction into medical practice, though we doubt not there are many other antispasmodics equally efficacious, and more easily procured, which with propriety might be substituted in its place. When properly administered, however, the musk sometimes succeeds in very desperate cases of disease. It raises the pulse

without much exciting the system; "it allays spasms, and operates remarkably on the brain, increasing the powers of thought, sensation, and voluntary motion." In low forms of fever, and in many spasmodic affections: as whooping cough, epilepsy, and locked jaw, it is highly recommended. Dose. from ten to twenty grains.

#### MEZEREON

Is a shrub growing in the northern parts of Europe, the bark of which, (the part used,) is thin, striped, and reddish; has no smell, but when chewed excites an exceedingly acrid, burning sensation in the mouth and throat. When applied to the skin in its recent state, or infused in vinegar, it raises blisters.

Mezereon enters as a constituent into the Lisbon diet drink; It has also been used with benefit in cutaneous diseases. When used in scrofulous affections of the skin, it is given in powder; the dose with which to commence is one grain three times daily; this may be increased according to its effects.

#### MUSHROOM CATSUP.

Take mushrooms and common salt, each four pounds, sprinkle the salt over them; when the juice is drawn out, add eight ounces of allspice and one ounce of cloves; boil for a short time and press out the liquor.

#### MURIATED TINCTURE OF IRON.

In point of activity, this article will perhaps be found inferior to none of the preparations of iron. It is employed in doses of from ten to twenty drops, frequently repeated, as an astringent, in cases of hæmorrhages from the stomach, bladder, kidneys, and womb. Externally applied, it is efficacious in destroying venereal warts. It is also an excellent chalybeate, and in doses of from fifteen to thirty drops, may be given with advantage in most diseases of debility without fever, three times a day.

#### MAGNESIA, CARBONATE OF.

This is principally given to correct acidity, and to act as a purge. A large dose of magnesia, unless acidity exists in the stomach, neither purges, or produces any sensible effect. Where this is the case, the dose, (from one to three drams,) may be made efficacious by administering a glass of lemonade or vinegar and water. When the carbonate of magnesia meets with an acid, there is extricated from it a quantity of gas, which very unpleasantly disturbs the stomach, for which reason the calcined magnesia is generally preferred.

#### MAGNESIA, CALCINED.

The carbonate of magnesia, when exposed for one or two hours to a red heat, loses the gas which renders it so unpleasant, and becomes more fit for medical use. This preparation is applied to the same purposes as the preceding article, and is not attended with the same unpleasant consequences. Dose, the same as the carbonate.

## MERCURY, OR QUICKSILVER,

When taken into the stomach in a metallic state, has no action, except from its weight or bulk.

## OPIUM.

This is the inspissated juice of the poppy. The kind mostly used in medicine comes from Turkey. Opium is at first a powerful stimulant, but its secondary effects are narcotic and sedative. It acts directly on the nervous system, and when received into the stomach, allays pain in other parts.

In common doses, opium increases the action of the pulse, also its fulness and force. It for a time increases the heat of the body and strengthens the bodily and mental functions, causing very often also a peculiar itching of the skin. It induces sleep, but its effects are sometimes followed by nervous tremors, sickness at the stomach, thirst, and the consequences, generally, which follow the excessive use of spirituous liquors. Excessive doses are followed by stupor, cold sweats, delirium, convulsions, apoplexy, and death.

This medicine is useful in many, especially in spasmodic and convulsive diseases. It is very often used in combination with other articles, to effect various purposes in the animal economy. In epilepsy, for instance, combined with musk, it has been strongly recommended. In short, in all cases where it is of importance to relieve pain and procure sleep, opium is undoubtedly the most valuable article of the *materia medica*.

The dose of this medicine should be regulated by the necessity of the case and its influence on the patient. From one to two grains are commonly given to produce a sedative effect, whilst in cases of tetanus, or the like, many ounces of laudanum have been given in twenty-four hours without producing any bad effect, or even sleep. It is used externally in various forms and combinations.

In Turkey, China, and Syria, this drug is used in large quantities, on account of its exhilarating and intoxicating effects; indeed, even in this country, too many, especially females, have adopted a similar practice. Its habitual use impairs the functions of the digestive organs, deranges the nervous system, destroys the faculties of the mind, and carries the infatuated victim through a distressing course of self-induced sufferings, to an untimely grave.

## OIL OF TURPENTINE.

This is a colorless liquid: the odour is strong, penetrating, and peculiar, the taste hot, bitter, and pungent. The manner in which it operates, depends on the quantity administered; thus in the dose of one or two fluid drams it most powerfully affects the urinary organs, so as often to produce bloody urine.

In the dose of an ounce, or more, it acts upon the bowels, without affecting the kidneys. In cases of worms, in doses of from half an ounce to three ounces, it is very efficacious. The dose should be repeated every eighth hour until the worms are expelled. In treating of the tapeworm, this article has been particularly mentioned.

In severe constriction of the bowels, where other cathartics have failed in producing a discharge, the oil of turpentine, combined with castor oil, has been found to produce a speedy effect.

As a diuretic or stimulant, the oil of turpentine may be given in doses of

from ten to sixty drops. It may also be used as an active clyster, by carefully combining two table spoonsful of the oil, with the yolk of an egg, and adding to it a pint of thin mucilage—as flaxseed tea, &c.

#### OINTMENT, MERCURIAL.

Take of purified quicksilver, and of lard, each three parts, by weight—suet one part: rub the quicksilver carefully, in a mortar, with a small portion of the lard, until the globules disappear; then add the remainder of the lard and the suet, rubbing them well together.

#### OINTMENT, WHITE PRECIPITATE.

Take of white precipitate, one dram; prepared lard, one ounce and a half; mix the white precipitate with the lard, which should previously be melted over a slow fire. This, in obstinate cutaneous affections, has proved very effectual.

#### OINTMENT, BASILICON.

Take of lard, eight parts; pine rosin, five parts; yellow wax, two parts. melt and stir them together until they become perfectly cool. Unless this last precaution is attended to, the constituent parts of the cerate will not be properly commingled.

#### OINTMENT, TAR.

Take of tar, five parts; yellow wax, two parts; mix them together, and strain through linen. This is mostly used as has been directed for scald head. It is also beneficial in some other affections of the skin.

The tar is, occasionally, simply mixed with fresh lard, in about equal proportions.

#### OINTMENT, SAVIN.

Take of fresh savin leaves, (bruised,) and yellow wax, each half a pound; fresh hog's lard, two pounds; boil the leaves in the lard until they become crisp; after this express the lard while warm from the leaves, and to it add the wax; lastly, melt again, and stir until cool. This is an excellent stimulating ointment.

#### OPODELDOC.—*Camphorated Soap Liniment.*

Take of Castile soap, twelve ounces; camphor, two ounces; volatile oil of rosemary, two tea spoonsful; alcohol, one gallon. Digest the soap in the alcohol for three days; then filter, and add the camphor and oil, intimately mixing them.

#### OINTMENT, SIMPLE.

Take of good sweet oil, five parts; white wax, two parts; apply a gentle heat, and intimately mix them. This ointment may be used for softening the skin, and healing chaps.



When sweet oil cannot be obtained, take two thirds fresh lard, and one third beeswax ; melt and stir till cool.

## POKE.

This vegetable is well known. A tincture of the ripe berries, in brandy or wine, is a popular remedy for rheumatism, and similar affections ; it, perhaps in a measure, possesses similar properties with guaiacum. The juice of the leaves has been applied to cancers ; it has also been esteemed beneficial in scrofula.

A tincture may be made by dissolving either the extract, or the leaves in their green or dry state, in common brandy. An ounce of the dried root, infused in a pint of wine, and given in the quantity of two spoonsful, operates kindly as an emetic.

A strong infusion of the leaves, used as an injection, is stated to be an excellent remedy for the piles.

## PINK ROOT.

We have written on the subject of this medicine when treating of worms, to which article the reader is referred.

Pink root is the *unsteetla* of the Cherokee indians ; every part of the plant possesses virtues as a vermifuge, although the roots are most active. Dr. Barton supposes that it will be found useful in some febrile diseases of children, unaccompanied by worms ; particularly in the intermittent fever, which too often lays the foundation of dropsy in the brain. Dr. Coxe says that one or two drams may be safely administered to an adult.

## POTASH, TARTRATE OF, OR SOLUBLE TARTAR.

In doses of from one to three drams ; this is a gentle laxative ; an ounce will prove strongly purgative. It may be observed, that when given to produce a cathartic effect, no vegetable or mineral acids, lime, or magnesia, should be joined with it, as these substances will destroy the desired effects.

## PAREGORIC ELIXIR.

To prepare this, take of opium and benzoic acid, each one dram : camphor, two scruples ; diluted alcohol, two pints ; digest for ten days and filter. This is often given to children. Dose, from five drops to twenty, and sometimes more. Half an ounce by measure contains one grain of opium.

## POTASH, SUB-CARBONATE OF.

This is frequently employed in medicine in conjunction with other articles, though it is often used by itself in doses of from five to twenty grains. These, when aided by sufficient dilution, frequently operate as powerful diuretics.

PLEURISY ROOT.—*Butterfly weed, &c.*

This plant abounds particularly in the southern states, and has been long celebrated for the cure of pleurisy, and of other affections of the chest. In

its action it determines to the skin, producing copious perspiration, without much heating the body. In strong infusion or decoction, it often induces an action on the skin, when other diaphoretics have failed. The powdered root, besides an expectorant and diaphoretic influence, possess not unfrequently a mild cathartic power.

Pleurisy root has long been considered an excellent domestic remedy, and given not only in colds, catarrhs, &c. but also to relieve pains in the stomach, arising from flatulence and indigestion. The dose is a tea cupful of a strong infusion or decoction every three or four hours.

#### PIPPSISEVA.—*Ground-holly.*

The leaves of this plant, (the part used,) are considerably astringent, and possess tonic and diuretic properties; in some instances they have afforded relief in chronic cutaneous affections. The bruised leaves, externally, applied, produce a redness, and sometimes a blistering on the skin. The dose, internally, is one or two wine glassesful of an infusion made by pouring a pint of boiling water upon one ounce of the leaves. This may be repeated every three or four hours.

#### QUASSIA WOOD.

This, when first procured, is of a whitish colour, which becomes yellow upon exposure to the air. It has no smell, but is perhaps the purest bitter known, and may be administered in all cases of debility where vegetable tonics are required. It is best given in an infusion made in the proportions of two drams of the quassia to a pint of boiling water. This, when cold, should be given in doses of a wine glassful several times a day.

A combination of the infusion of the quassia, and Fowler's solution, has been spoken of under the head of "Fever and Ague."

#### ROCHELLE SALTS.

This article is principally used in preparing the Seidlitz powders. When used by itself as a purgative, it must be given in larger doses than the Epsom or Glauber's salts.

#### RED PRECIPITATE.

The internal use of this article is unsafe; sometimes, however, it is applied externally, when reduced to a very fine powder, to obstinate fungous granulations. It is also used, rubbed up with common salve, to form a stimulating ointment.

#### RHUBARB.

Combining the purgative with an astringent, and a tonic principle, rhubarb differs from most other cathartics in its operation upon the system; for while it acts effectually, it increases, instead of lessening the tone of the intestines. It is also peculiar in not being restricted in its action upon the bowels by combination with opium; a knowledge of this fact is important in those diseases which while they require free evacuations, at the same time demand an alleviation of pain.

Combined with calomel, rhubarb is administered in our autumnal bilious

fevers. In diseases of children, few medicines are to be preferred to rhubarb; it may be taken with facility in a little molasses, and operates so gently, that it can be safely given at a very early age.

The dose of rhubarb for an adult, is from twenty to forty grains.

#### SENNA.

This is a very useful cathartic, operating with certainty, and effectually. The only inconvenience resulting from its use, is the griping with which its operation is sometimes attended. This is best obviated by adding to the senna some aromatic substance, such as ginger or cinnamon; and by drinking, during the operation, plentifully of some mild diuient.

Senna may be given in substance, in the dose of a dram, but this, from its bulk, is highly unpleasant. It is much more conveniently taken in the form of an infusion. This may be made by pouring an half pint of boiling water on four to six drams of the leaves, which after standing for an hour, should be taken in two successive doses, between which, fifteen or twenty minutes may intervene. When more than an half pint or pint is made at a time, if not used within a few hours, the infusion becomes unfit for use. The addition of half an ounce of Epsom salts will add to the ease and efficacy of the operation. Manna is also a useful constituent of the senna tea, rendering it not only more agreeable, but also more effectual.

#### SQUILLS.

This article is expectorant and diuretic. The dose of dried squills is one or two grains three or four times a day.

#### SQUILLS, VINEGAR OF.

This is a powerful stimulant, and is frequently used with considerable success as a diuretic and expectorant. The dose of this article is from a tea to a table spoonful. To produce vomiting, however, a larger quantity will be required.

#### SQUILLS, OXYMEL OF.

The medicinal use and dose of this preparation are much the same as the preceding article.

#### SENEKA SNAKE ROOT.

This root is usually about the thickness of a quarter or half an inch; it is variously bent and contorted, and appears as if composed of joints, giving it an imaginary resemblance to the tail of the rattle snake. The bark contains the active principle of the root; its taste is at first acrid, but afterwards becomes hot and pungent—it has little or no smell.

In medicine, this root is applied to various purposes. It is an active stimulant, and increases the force of the circulation, especially that of the pulmonary vessels; hence it has been found serviceable in low forms of inflammation of the lungs; it has likewise been administered in hydropic cases, with benefit. Seneka has been employed in the decline of pleurisies and catarrhs, to promote expectoration. It has also been exhibited in female obstructions. Professor Chapman has found it of great use in obstinate suppression of the

menses; for this purpose, he uses a decoction, prepared by adding an ounce of the root to a pint of boiling water; this is to be slowly simmered down to one third. Dose, six or eight table spoonful to be taken during the day, and at the period the menstrual effort is expected, it may be increased as far as the stomach can bear.

#### SALINE DRAUGHT.

The most frequent plan of administration of the sub-carbonate of potash, is the saline draught, which has a tendency to induce gentle perspiration, and to allay the irritability of the stomach when nausea and vomiting are present.

To make this preparation, dissolve two drams of the sub-carbonate of potash in a gill of water, and to a table spoonful of this mixture add the same quantity of sharp vinegar; this combination should be taken during the effervescence which immediately ensues.

#### SULPHUREOUS FUMIGATIONS.

In obstinate diseases of the skin, such as herpetic affections; in rheumatic complaints, and *pseudo syphilitic* or mercurial diseases, there appears very sufficient testimony to authorize us in believing that sulphureous fumigations may be eminently useful.

A committee of three of the first physicians in Paris, investigated, in the year 1816, an apparatus erected for the purpose of effecting this mode of fumigation, by Mr. Gales, in that city. Their report was very favourable. So important was this invention or improvement deemed, that the exclusive privilege of using the remedy in Paris was granted to M. Gales.

An establishment on similar principles, was in operation in 1823, in this city, under the superintendence of Mr. Boyd Reilly. So far as we have been able to ascertain from the certificates of several respectable citizens, it was productive of much benefit in various forms of disease, especially those which have been above enumerated.

The subject is well worthy of attention indeed; external modes of sweating with medicated vapours, appear to attract much more attention than they did some years since.

We have already spoken of the infusions of vegetables used as baths by the Creole nurses in the West Indies, for the cure of yellow fever.

Sweating can be effectually induced, when it is prudent to raise and move the patient, by the warm bath; but care should be taken to prevent the access of a current of cold air, to the relaxed surface of the body. The patient should be afterwards carefully wrapped up in blankets.

Even bathing the feet and legs frequently causes a free perspiration.

Another excellent mode of inducing a copious discharge from the pores is to apply to several parts of the patient's body, say the sides, legs and feet, large hot stones or bricks, wrapped up in flannels. These stones or bricks should previously be dipped in a bucket of water, thus they imbibe, and whilst cooling, throw out a considerable portion of moisture.

#### SWEATING.

To excite an increase of perspiration, various modes have been recommended in the course of this work, by the use of internal remedies; mechanical and external aid is, however, often of the greatest importance; this has long been known, even to savage nations.

The external modes by which sweating may be excited are very numerous.



Some years ago, Dr. Jennings, of Virginia, introduced into practice, a plan which appears to have answered very good purposes. "The patient being laid in bed, is to be covered closely with blankets which are prevented from pressing on, or coming in contact with the body, by segments of hoops; at the feet, is inserted one end of a curved tin tube, three inches in diameter, which is formed of various parts that will slide into each other for convenience in carrying the other end of this tube; reaches nearly to the floor, and under it is placed a cup of burning alcohol or brandy. This mode of practice will, in a short time, produce copious sweatings; its continuance must, of course, depend on the patient's condition. It is useful in many instances, especially in chronic cases.

#### SPICED RHUBARB.

Take of pounded rhubarb five drams; cloves and cinnamon, each half an ounce; two nutmegs and a pint of water; digest and evaporate until the liquor is reduced to half a pint; strain, and add one pound of sugar, and half a pint of alcohol, then boil the mixture sufficiently long to form a syrup.

#### SOAP.

This article, so essential for common purposes of cleanliness, is often used in medical and surgical practice externally, in combination with water, as a wash for ulcers; and it occasionally, in the form of suds, is used as an injection; it enters often also into the composition of pills.

For medical use, as being milder, less irritating, and more elegant preparation, the Castile soap is preferred.

#### SALTPETRE.—*Nitre.*

This article is found abundantly in several parts of the United States. Taken to the extent of two or three drams dissolved in water, or in powder, during the day, it diminishes the heat of the body and the frequency of the pulse. It operates by stool, and influences the secretion of urine, but it is apt to produce painful disorders of the stomach. Taken in the dose of an ounce, it produces the most dreadful symptoms, such as constant vomiting and purging, with discharges of blood, convulsions, and death. As its appearance is very similar to Glauber's salt, mistakes have unfortunately been made in the exhibition of the one for the other; great caution is therefore necessary to have the papers containing them properly marked.

Nitre is best given in small doses, as from five to twenty grains, frequently repeated. Its internal exhibition is only admissible in inflammatory diseases. This article enters in various combinations of medical prescriptions, or gargles, &c.

#### SULPHUR, FLOUR OF.

This is gently laxative, and at the same time promotes insensible perspiration. It is frequently given, especially to children, in combination with cream of tartar. Used externally as well as internally, it is an excellent remedy for the itch, (*see the article Itch*), and some other cutaneous disorders. In the piles, when it is necessary to keep the bowels gently open, sulphur may be used with great advantage.

Sulphur in small doses, is also recommended in chronic catarrhs. Dose, as a purge for an adult, two tea spoonsful mixed in molasses or syrup.

## SWEET SPIRITS OF NITRE.

This is one of the mildest and most agreeable diaphoretics we possess; its odour is fragrant, taste pungent, and it is very volatile and inflammable. It is admirably adapted to the diseases of children and weak constitutions. In fevers it may be given in doses of from twenty drops to a tea spoonful, in any mild drink, and frequently repeated. It quenches thirst, promotes the natural secretions, expels wind, and moderately strengthens the bowels.

## STRENGTHENING PLASTER.

Take of litharge plaster twenty-four parts; white resin six parts; yellow wax and olive oil of each three parts; red oxyde of iron or colcothar, eight parts. This plaster may be used in weaknesses of the large muscles; its effects seem to proceed from the mechanical support afforded to the part.

## SYRUP OF RHUBARB.

Take of powdered rhubarb two ounces; boiling water one pint; steep them for twenty-four hours; strain, and add two parts of sugar to one of the liquor; then boil to form a syrup.

## SASSAFRAS.

The sensible qualities contained in the bark of the root of this plant are too well known to require description. It is seldom administered except in conjunction with other medicines. The essential oil of the bark, however, is used, and found to be a gently heating and stimulating remedy. It may be given in doses of from two to ten drops.

## SEIDLITZ POWDERS.

Take of Rochelle salts two drams; carbonate of soda two scruples; let these be powdered, mixed, and kept in a white paper; and in a blue one, let from thirty to thirty-five grains of the tartaric acid, also pulverized, be contained; the powders of each paper may then be dissolved separately in half tumblers of water, and the separate portions of water added together, and taken during the effervescence which ensues. The acid here being in excess, renders the mixture more grateful and no less efficacious as a purge.

## SUGAR OF LEAD

Has a sweet styptic taste, chrystalline form, is soluble in water, and upon being exposed to the air, the surface of the chrystal becomes converted into a whitish powder. Sugar of lead is used both internally and externally. Internally, it is highly recommended in hæmorrhages from the lungs, stomach, womb, and indeed from every part of the body. It ought, however, in these cases, to be preceded by copious venesection, if any fulness and activity of the pulse is perceptible; for without this, the lead will prove inefficacious, and often positively injurious. It may be administered under such circumstances in pills, each consisting of two grains of lead and a quarter of a grain of opium: these may be repeated according to the exigency of the

case. As an injection in gonorrhœa, it may be dissolved in water, in the proportion of two grains to the ounce. As an external application it is highly valuable in superficial inflammations; bruises, &c. For this purpose, two or three drams should be dissolved in a pint of water, and rags wrung out of the solution kept constantly applied to the part affected.

## SODA POWDERS.

Take the carbonate of soda thirty grains, and twenty-five of tartaric acid. Let the powders be kept in separate papers, and when taken, dissolved in two portions of water, about half a tumbler each; let these be added together, and taken during the effervescence which is consequent upon this mixture.

## SPICE PLASTER.

The stomach, in some cases of disease, is exceedingly irritable, so that all internal remedies are rejected; here it becomes necessary to resort to external measures. One of the means best calculated to arrest vomiting is the application of a spice plaster over the region of the stomach. This should be made by adding to a sufficiency of honey or molasses, to make a tenacious mixture, ground pepper, cinnamon, and cloves, of each two table spoonsful. This will frequently calm the irritability of the stomach, when internal remedies have failed.

## STOUGHTON'S BITTERS.

Take of gentian root two pounds four ounces; Virginia snake root one pound; dry orange peel one pound eight ounces; calamus four ounces, rectified spirits of wine, and water, each six gallons. Let this mixture stand two or three days before it is used.

## SAGO

Is a light, farinaceous substance, which becomes soft and transparent by boiling in water, and forms, when thus prepared, an agreeable diet for the sick. To render it more pleasant, it is customary to join with it lemon juice and sugar, and when it is desirable to impart strength to the patient, a little wine may also be added.

## TOBACCO.

This well known plant, although it possesses very deleterious qualities, is, when properly used, valuable as a medical agent. Its active constituent is an essential oil; small animals are almost instantaneously killed when wounded by a needle dipped in it. In large doses, the different preparations of tobacco operate as severe cathartics and emetics.

It is given in infusion, in water or wine, so as to cause nausea, but not puking; dose, from five to twenty drops. It has, in this form, been used in cases of dropsy.

Tobacco smoke is sometimes injected into the rectum in cases of suspended animation, also in cases of obstinate constipation. Dr. Mease, of Philadelphia, states that injections of an infusion of tobacco have been used with success in cases of locked-jaw. Professor Barton states, that the leaves

pounded with vinegar and applied to the stomach, have often discharged worms. Dr. Edward Cutbush of the United States' navy, recommends an external application of leaves of the tobacco stewed in vinegar, for the cure of dropsy, and relates an interesting case in which a cure was effected by this means under his care, at Syracuse, in Sicily.

#### TARTAR EMETIC.—*Antimonium Tartarizatum*:

This is the most useful of all the antimonial preparations. Its action is not dependant on the state of the stomach. As it is soluble in water, its dose is easily regulated, and it operates the more speedily. It is given as an emetic, to adults, in doses of from two to six grains, but the doses should always be divided, and the portions given at short intervals; thus, dissolve four grains of tartar emetic in a gill of warm water, and administer first, two table spoonsful and then one every fifteen minutes until it operates effectually; the puking should be assisted by drinking lukewarm water. In cases of great debility, typhus fever, &c. its use is improper; sometimes it purges.

In small doses of from an eighth to a quarter of a grain, it induces perspiration, and in still smaller doses operates as an expectorant. In very small doses combined with calomel, it has been found very useful as an alterative in obstinate eruptions of the skin.

Tartar emetic in the proportion of two drams, incorporated with an ounce of lard, is useful, when applied on the breast, in deep seated inflammations of the chest, or it may be dusted over a piece of leather, spread with adhesive plaster, leaving the edges untouched, that it may adhere more firmly.

#### TIN, POWDER OF.

It will be necessary to obtain this article already prepared. It is chiefly used as a remedy against worms, particularly the tænia, and has been already spoken of under that head.

#### VITRIOLATED TARTAR.

This salt is of a hard crystalline form, slightly soluble in water, but insoluble in alcohol. In small doses of twenty or thirty grains, it is a gentle laxative; in larger doses of four or five drams, it is a mild cathartic, though its difficult solubility renders it more protracted in its operation on the bowels than the other neutral salts. It is rarely used by itself with a view to its purgative effect; but on account of its hardness, it is much better calculated for triturating and dividing substances of difficult combination. It is principally for this purpose used in the Dover's powders.

#### VIRGINIA SNAKE ROOT.

This is a light, bushy root, consisting of a number of small fibres, matted closely together. It has an agreeable aromatic smell, and a warm, bitter taste. Its virtues are owing principally to an essential oil existing in the plant.

The general action of this root on the system is heating and stimulating. The particular effects for which it is administered are the promotion of perspiration and urine. It may be given in doses of twenty or thirty grains. It may also be given in infusion with bark, to assist its tonic power. By decoction or boiling, the virtues of the root are destroyed.



## VOLATILE LINIMENT.

Take of good sweet oil two ounces, water of ammonia two drams, mix them together. This preparation is found to be an excellent application in bruises, sprains, &c.

## WHITE PRECIPITATE.

This is used externally in combination, in the form of ointment, as an application in some cutaneous affections.

## WHITE VITRIOL, OR SULPHATE OF ZINC.

The white vitriol has a metallic, styptic taste; it effloresces slowly when exposed to the air; it is soluble in water, but not in alcohol. To produce an immediate emetic effect, ten or fifteen grains may be given. It may be used as a local application to arrest hæmorrhages and diminish the gonorrhœal discharge.

There is a preparation into which this article enters, called *Moseley's Vitriolic Solution*, which has gained considerable reputation in many diseases. It is composed of white vitriol, three drams; alum, one dram; cochineal, three grains; boiling water, one pint; these should be mixed together until the solution is cold, and the sediment is deposited, then pour off the liquor for use. The usual dose to produce nausea is a small table spoonful. Larger quantities will cause copious vomiting.


## WINE WHEY.

This article will often agree with an enfeebled stomach when neither wine or sangaree will answer. It may be made strong or weak as occasion requires. When milk has been kept on the fire until it simmers or boils, a very small quantity of wine added and stirred in will separate the curd from the whey: more wine, if it be desired, can be afterwards added.

In cases of great prostration, brandy may be used instead of wine. The whey should be sweetened to suit the palate, and a little nutmeg may be added.



## APPENDIX.



### ADDITIONAL REMARKS ON CONSUMPTION.

IN the treatment of pulmonary consumption, we have derived evident and essential benefit from the use of digitalis. The effects of this article on the system have been already described ; in one case, particularly, the powdered leaves were administered, commencing with two grains, and increasing the quantity to five and six grains a day, combined with a little calomel.

Bleeding was also resorted to, repeated frequently, but in small quantities, while excessive general debility was prevented by a cautious use of tonics.

The object held principally in view by this course, was to relieve the lungs as much as possible. The issue of this, and other cases, induces us to believe that reducing the pulse, and keeping it in subjection, is a matter of great importance in this disease.

Air and situation are objects of great importance to those who are affected with pulmonary complaints ; this has already been in part intimated. It may not, however, be amiss here to observe that those who can have no comfort in high and exposed situations, very often may enjoy a comfortable state of health in consequence of removing to a more southern part of the country, where the air is more soft, mild, and less liable to sudden changes.

## LUMBAR ABSCESS.

This disease is not common in the United States. Its causes are very obscure. The symptoms are pain in the loins, extending down the thigh, and the patient is fatigued on taking the slightest exercise. These symptoms may continue for months without much sensible change; eventually hectic fever supervenes, and a fluctuation of matter is perceived sometimes below the groin, occasionally in other parts. The tumor generally recedes when the patient is in a recumbent posture. Dr. Physick states that he never met with a case of psoas, or lumbar abscess in America, unconnected with disease of the spine.

When the matter which has been a long time forming is suddenly discharged in large quantities, the patient generally sinks in a very few days; but when the contents of the abscess are discharged gradually through a narrow aperture, life may be protracted, or a spontaneous cure effected.

Very few patients, however, recover from this disease. It appears to be the opinion of eminent surgeons, that either a small opening is best, if one be at all made, or that the matter should be suffered to escape of its own accord. Severe, extensive, and continued blistering, in the early stages of this disease is advisable; the blisters may be dressed with the savin ointment.

When the patient's general health begins to be impaired, as evinced by weakness; stimulants, tonics, and a generous diet should be administered.

Mr. Abernethy proposes making an opening in the most prominent part of the tumor, with a common lancet, barely sufficient to permit the escape of the coagulated lumps of blood, &c. permitting a small quantity of matter to pass off, and then by dressing with adhesive plasters, healing the wound by the first intention. In a week or two the operation must be repeated. Thus he drains the abscess gradually, which plan affords a more favourable opportunity for the upper and remote parts of the cavity to heal by degrees.



## FEMORAL ABSCESS.

Deep seated purulent abscesses, not unfrequently form in the thigh, generally, confined by the broad fascia or covering which binds down the muscles. Dr. Gibson is of opinion that these collections of pus, occur oftenest in children of from six to twelve years of age.

This disease is often, at first, mistaken for rheumatism, the pain extending from the top of the thigh down to the knee. The swelling at the commencement is hard and unyielding ; the patient finds a difficulty in bending the joints of the hip and knee ; as matter forms, the constitutional symptoms increase, and after a time, regular hectic fever makes its appearance. The tumor sometimes extends even below the knee. Very often a large quantity of matter is formed before any fluctuation is perceived, as the membrane of which we have spoken does not easily take on ulceration, and opposes the progress of the abscess towards the surface. Care should be taken not to confound this disease with lumbar abscess.

Blisters have been strongly recommended at the commencement of this complaint, but in most instances it has progressed too far, before its nature is understood, for benefit to result from their application.

When a fluctuation is perceived, an opening should be made with a common lancet, which uniformly affords relief by a copious discharge of matter. A small roll of linen should be introduced into the opening, and the limb carefully and firmly bandaged ; the general system should be well supported through the course of this disease.

## OF CORNS.

Corns are hardened portions of the cuticle, or scarf-skin, produced by pressure, and are often very troublesome on the feet. They may be caused by wearing tight shoes

A corn can be gradually removed by having a piece of leather, or two or more pieces, if necessary, which are spread with adhesive plaster, cut through in the centre, so as to admit the corns, and then applied over it, so that the pressure of the shoe will rest on the surrounding parts, the corn itself coming through, nearly even with the external surface of the leather. The corn should be from time to time cut off, but not to the quick, or sensitive part; the external coat of leather may be removed in a few days, or if one thickness of leather be used, a somewhat thinner piece may be applied, but care should be taken that there is no pressure on the corn itself. In two or three weeks it will be entirely removed, but a piece of thin soft leather should be worn over the part for some time afterwards.

## OF CARBUNCLES.

The carbuncle, in some respects, resembles the common boil. It is a hard circumscribed swelling, of a livid appearance, attended by deep seated burning pain, and a disagreeable itching.

This affection, unlike the common boil, has no core, and never runs on to suppuration, though a thin, acrid fluid is discharged from the cellular cavities of the tumor, by small pores which cover its surface.

The constitution not unfrequently sympathises with the local affection, and the patient suffers from fever, great prostration of strength, want of sleep, nausea, and loss of appetite, so that he not unfrequently sinks under his complicated sufferings.

In the treatment of this complaint, its particular stage should be taken into consideration, as the mode of cure differs materially during its progress. When it first occurs, all irritating applications should be avoided; soft flaxseed or bread and milk poultices will be found to afford considerable relief. These should be continued until the bloody, sanious discharge commences from openings in the surface of the tumor, when they should be

laid aside, and the vegetable caustic alkali, (which should be procured from a careful apothecary,) freely applied over the part affected. Concerning this remedy, Doctor Physick, to whom we are indebted for the suggestion, says, that "in all cases in which he has used the caustic in this manner, the suffering of the patient ceased as soon as the pain from the caustic subsided." During the continuance of the complaint, as the patient suffers severely from it, opium should be freely given to relieve pain, and procure sleep; and where debility is present, the system should be supported by bark, elixir of vitriol, and an invigorating diet.

## CHILBLAINS.

Chilblains are the effects of inflammation, arising from cold. They are attended with redness, itching, a sensation of heat, and more or less swelling. In mild cases, these symptoms after a time spontaneously disappear; occasionally, however, the pain is so severe that the patient cannot use the part; vesicles, or small blisters appear on the surface, which burst and change into ill-conditioned sores; these sometimes penetrate as deeply as the bone, and discharge a thin ichorous matter.

Chilblains are very apt to occur in persons who are in the habit of going to the fire during the winter season immediately on coming out of the cold; hence the disease generally affects those parts of the body which are most exposed to sudden transitions, for instance, the nose, ears, lips, toes, heels, and fingers.

The most likely method of preventing chilblains, is to accustom the skin to moderate friction, to wash the parts frequently with cold water, to take regular exercise in the open air in all weathers, and particularly to avoid entering into very warm rooms immediately after exposure to intense cold.

When the complaint, however, does occur, one of the best modes of curing the milder kind is to rub them with snow or ice cold water, and bathe them in the latter se-

veral times a day, keeping them immersed each time until the itching and pain abate. After thus bathing and rubbing the parts, they should be well dried and covered with flannel or woollen socks. Where, however, in weakened constitutions, such applications are inadmissible, the parts affected may be rubbed with spirits of wine, volatile liniment, tincture of myrrh, or a strong solution of alum. Equal parts of the spirits of turpentine and balsam of copaiva is an application which has been used with benefit. A mixture of two parts of the spirits of camphor and one of the solution of the sugar of lead has also been praised. Wardrop advises a combination of one part of the tincture of cantharides with six of soap liniment.

These various prescriptions are peculiarly adapted to the milder form of the complaint. When, however, it runs on to suppuration and ulceration, the sores require stimulating dressings, such as lint dipped into a mixture of lead and lime water; tincture of myrrh, or warm vinegar; sometimes the application of a solution of the lunar caustic will be found serviceable.

When chilblains are attended with mortification and sloughing, poultices should be applied until the dead parts are removed, and then gently stimulating substances, as the basilicon ointment, &c. should be applied. If this should not be attended with benefit, other substances of a similar nature ought to be tried.

## FELON, OR WHITLOW.

This painful disease most frequently appears in the ends of the fingers. On account of the deep seat of the complaint, the matter sometimes passes gradually upwards until the hand and part of the arm become affected. It is often attended with excessive pain and constitutional irritation, so that opiates are occasionally required to alleviate the distressing sensations, and procure rest.

When the complaint is permitted to proceed without



proper remedies, weeks are often required for the confined matter to escape by the skin, and consequently for relief to be obtained by the patient. Indeed, upon examination, the bones of the fingers which have long been exposed to disease, are often found in a carious or rotten condition, and the proper functions of the muscles and tendons of the part are sometimes completely destroyed. We have seen the hand of a labouring woman permanently contracted and rendered useless by this complaint, extending from the finger so as to involve the hand and wrist.

The causes of whitlow are generally of a local nature. The following are enumerated as the most common: contusions, pricks with needles or other sharp instruments; sometimes it depends on a splinter or thorn which continues lodged in the finger.

In the commencement of this affection blisters may be useful, and if any febrile action exists, bleeding from the arm will be required. If this method fails of procuring a resolution of the swelling and a subsidence of the pain, warm poultices should be applied several times a day; these often give relief by softening the skin and removing tension. When this also fails, and the swelling has become considerable, with great pain, it becomes advisable to lay the finger open so as to reach the matter. A poultice ought then to be applied until the discharge ceases, and the inflammation has somewhat subsided, when the part should be dressed with any mild ointment.

In some violent cases of whitlow, Dr. Perkin of Philadelphia, has effected cures in a very short time by applying to the part, on lint steeped in the tincture of myrrh, an admixture of equal parts of corrosive sublimate and white vitriol. This he suffers to remain on several days.

Experience warrants us in the opinion that where a felon is completely evidenced, a free incision to the bone, is more likely than any other plan, to preserve the use of the fingers. Many indeed suffer months, and even years from pain, ulceration, and a carious state of the bones of the hand, in consequence of objecting, through timidity, to this operation.

## FRETTED OR CHOPPED NIPPLES.

These not unfrequently occur shortly after delivery, especially with young females, and become exceedingly irritated and painful.

To relieve the patient, the parts may be washed five or six times a day, with a solution of alum in rose water, and then dressed with fine lint, spread with the following: take of honey, three drams; borax, one scruple; and a little prepared chalk, sufficient to give consistency to the whole mixture. This will frequently be found very serviceable.

The nipples should be carefully washed before the child is permitted to suck; indeed it is sometimes necessary to take the child, for a time, from the breasts, which should be drawn regularly by other means.

Soreness of the nipples may generally be prevented by precautionary means; these can be adopted even before *confinement*. The nipples should be washed twice or thrice daily, with brandy and water, or alum water, which is not made too strong.

## ACCIDENTS,

### TO WHICH CHILDREN ARE LIABLE.

“Children are not only lamed and maimed, but they often lose their lives by accidents, owing to the carelessness or inconsiderate neglect of nurses and mothers. A child should never be left alone in a place of danger, or in a situation where he may, through his own want of experience, be exposed to the destructive effects of fire or water. We daily hear of children that have been burned to death, in consequence of their clothes having caught fire; and even grown people often lose their lives by similar accidents.

“Afflicting events of this kind often take place even under the mother’s eye; and what is surprising, their frequency does not prepare women for the most effectual method of extinguishing the fire. Distracted by the frightful scene, and the cries of the sufferer, they rush to tear off the burning clothes. But, before this is effected, the mischief is done. The attempt, therefore, should never be made. The clothing, instead of being torn off, ought to be pressed close to the body, and whatever is at hand wrapped over it, so as to exclude the air, upon which the blaze will go out. It is the action of the air that keeps it alive, and increases its vehemence. A carpet, a table-cloth, a blanket, any close wrapper, will instantly extinguish it. Few people are ignorant of what ought to be done to extinguish flame; but presence of mind or courage is wanting in the moment of sudden danger, and the consequences are most deplorable. Nay, I have known children carried into the street, that the air might extinguish the flame.

“It must be evident enough, from what I have said of excessive care in the treatment of children, that I would not have mothers or nurses over-solicitous about trifles: but where exposure to danger may be attended with irreparable mischief, it cannot be too cautiously guarded against. I would therefore have the upper garments of children, when they can run about, made of woollen materials, which do not so readily catch fire as manufactures of flax and cotton. I would also have children taught very early to dread the fire.

“When children are cold, they are very apt to get close to the fire; by which means they not only run the risk of being burned, but of inducing whitlows or other inflammatory disorders of the extremities. In these cases, however, I would not have the preventive care of nurses or parents carried too far. The actual experience of the tingling effect, will operate more powerfully than any thing which can be said to young people, to make them avoid it. When they have once felt the smart, a few words to remind them of the cause will be quite sufficient; and they will easily acquire the habit of rubbing their hands

and running about, rather than going to the fire to warn themselves, after having been out in the cold.

“The accidents from scalding are still more numerous. Children are in continual danger where victuals are cooking; and in the country especially the kitchen is often the nursery. One of the finest boys I ever saw, lost his life in this manner. He was dancing round the kitchen, when a pot full of food for some domestic animals, which had just been taken off the fire, stood in his way; he fell backwards, and was so scalded, that in spite of all my best endeavours, he died.

“Perhaps there is not a more painful death, than that which is the consequence of scalding or burning. When instantaneous, it is nothing; but when lingering, it is dreadful beyond imagination. We can only form some imperfect idea of it from the intense pain occasioned by scalds or burns, though not of deadly effect. I once had a patient, about one half of whose skin was scalded, by falling into a boiler. Though this man recovered, yet so great was his agony, that every time he was dressed, he used to beg and pray to be put to death.

“Accidents by *cold* water, though not so frequent in early life as those occasioned by fire, ought nevertheless to be guarded against with due precaution. Wells and ponds of water near houses are frequently left open, or without any fence round them, as if they were designed for traps to allure the unwary to destruction. It is well known that young people are fond of looking into the water, especially when they can see their own image or likeness, and it is a weak security against the danger of open wells, ponds, pits, or the like cavities, to tell a child to take care.

“But it is not only in yards and gardens that the least slip may sometimes be fatal to children; they are often exposed to almost as much danger within doors, by falls in various situations. As, from the usual lightness of a child, a leg or arm is seldom broke by such an accident, little notice is taken of it at the time; but although it may not seem to do much hurt for the present, it often lays the foundation of future maladies. The fine organization and structure of the brain may receive a dangerous shock;



and there is reason to believe that the *hydrocephalus internus* is sometimes the consequence of bruises, blows, or other injuries done to the head. I lost a promising boy, through an affection of his brain, which I thought was owing to a fall from a kitchen-dresser."—*Buchan*.

## TREATMENT OF INTOXICATION.

Persons who have drank to excess, more particularly those unaccustomed to inebriety, sometimes perish for want of simple and timely aid. They often sink into a state of stupor, rather than natural sleep, in a posture extremely unfavourable to the free circulation of blood and respiration: the strong tendency of intoxication also to impel the blood towards the brain, occasionally induces apoplexy.

If the person who is overcome by the influence of intoxicating liquor, be able to swallow, a dose of white vitriol, say from ten to twenty grains, should be administered without delay; after its emetic operation, balm, sage, or chamomile tea, should be drank, and sleep may then with safety be permitted. Sometimes, however, when there is an evident and strong tendency of blood towards the head, local bleeding, especially in the temporal artery, is necessary. If the patient be unable to swallow, a steady and continued stream of cold water poured on the head will be found useful; and when sensibility begins to revive, the inside of the throat should be tickled with a feather to excite vomiting. All articles of dress, especially about the neck, should be loosened.

## BEEF TEA.

As an article of diet, where the digestive powers are weak, beef tea is excellent; it has a very grateful taste, and does not oppress the stomach. To make this pro-

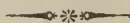
perly, cut one pound of lean beef into small, narrow pieces, and boil it in a quart of water, for twenty minutes, taking off the fatty matter as it rises. When it grows cold, the liquor should be strained through a clean cloth, seasoned and given in quantities sufficient to strengthen the patient, but not to overload the stomach.

### ESSENCE OF BEEF.

This is another plan of administering nourishment, where from irritability or weakness, the stomach rejects more solid articles. Take one pound of lean beef, cut it in small pieces, and having introduced it, with a small quantity of water, into a bottle, let this be tightly corked, and exposed to a boiling heat, in a pot of water, for one or two hours. Upon examination it will be found that the essentially nutritious parts of the beef are in a fluid state. The liquor should then be strained off, and seasoned to suit the palate of the patient.

When the digestive organs are become somewhat reinstated in their healthy functions, and it becomes proper to exhibit solid animal food, this should not be cooked much, but given slightly done, and combined with as little fatty or gross matter as possible.

# INDEX TO THE DISEASES.



A		Page		Page
ANATOMY,		30	Bladder—inflammation of . . .	251
	of the bones . . .	ib.	Blood—involuntary discharges of . . .	287
	of the muscles . . .	31	Spitting of . . .	295
	of the brain and nerves . . .	32	Causes . . .	ib.
	of the heart, circula- . . .	33	Symptoms . . .	296
	tion &c. . .	33	Mode of treatment . . .	299
	of the stomach, &c. . .	35	Vomiting of . . .	300
	of the glands . . .	36	Bleeding at the nose . . .	289
	Ague, or Intermittent fever . . .	108	Mode of treatment . . .	290
	Causes of . . .	ib.	Bloody urine . . .	301
C				
	Symptoms . . .	109	Contagion and infection defined . . .	9
	Mode of treatment . . .	ib.	Climate of the Western Country . . .	15
	Doctor Buchan's remarks on . . .	112	Features of uniformity at- . . .	ib.
	stimulants . . .	112	tached to its atmosphere . . .	16
Asthma,		346	South and south west winds . . .	17
	Causes . . .	347	North west winds . . .	17
	Symptoms . . .	ib.	Want of elasticity in the . . .	ib.
Apoplexy,	Mode of treatment . . .	ib.	atmosphere do. . .	ib.
		350	Explanations . . .	18
	Causes . . .	351	Natchez and New-Orleans . . .	20
	Symptoms . . .	ib.	Barrens and prairies do. . .	ib.
	Mode of treatment . . .	ib.	Carbuncles, of . . .	544
	<i>Coup de soleil</i> , or stroke . . .	353	Cold plague, of the . . .	134
	of the sun . . .	353	Causes . . .	135
Appetite—want of . . .		356	Symptoms . . .	136
B				
Bilious inflammatory fever . . .		103	Mode of treatment . . .	137
	Causes . . .	104	Of bleeding for do. . .	ib.
	Symptoms . . .	ib.	A protracted case af- . . .	140
	Mode of treatment . . .	105	fords ground for hope . . .	140
	Highest grade of do. . .	106	Corns, of . . .	543
Brain—inflammation of . . .	Attention to the patient's . . .	107	Consumptions . . .	161
	longings . . .	107	Dyspeptic . . .	ib.
		171	General causes . . .	164
	Causes . . .	ib.	Remarks of Doctor . . .	166
	Symptoms . . .	ib.	Thomas . . .	166
	Mode of treatment . . .	172	Precautionary remarks . . .	167
	Bleeding in the temporal ar- . . .	173	Symptoms . . .	168
	tery . . .	173	Mode of treatment . . .	170
			Additional remarks . . .	541

	Page		Page
Colds . . . . .	189	Drowned persons . . . . .	490
Causes . . . . .	ib.	Mode of treatment . . . . .	ib.
Symptoms . . . . .	190	Noxious vapours . . . . .	493
Mode of treatment . . . . .	ib.	Effects of extreme cold . . . . .	495
Stomach cough . . . . .	194	Do. . . . . do. heat . . . . .	496
Nervous cough . . . . .	ib.		
Cholera Morbus . . . . .	219	D	
Causes . . . . .	ib.	Drunkenness . . . . .	82
Symptoms . . . . .	221	Danger of intemperance . . . . .	83
Mode of treatment . . . . .	ib.	Diseases consequent to . . . . .	84
Colic, of the . . . . .	229	Destruction of mental . . . . .	
of the Flatulent . . . . .	ib.	faculties . . . . .	85
of the Bilious . . . . .	231	Diseases—the knowledge and cure of . . . . .	93
of the Nervous or Painters . . . . .	232	Temper of mind to be con-	
Chicken pox, of the . . . . .	275	sulted in sickness . . . . .	94
Symptoms . . . . .	276	The necessity of attending	
Mode of treatment . . . . .	ib.	to existing symptoms . . . . .	95
Costiveness, of . . . . .	354	Cautions relating to the	
Chilblains . . . . .	545	diseases of children, and	
Children, diseases of . . . . .	432	of females . . . . .	96
of the Meconium . . . . .	435	Dysentery, of the . . . . .	235
Thrush or Aphthæ . . . . .	ib.	Causes . . . . .	237
Mode of treatment . . . . .	436	Mode of treatment . . . . .	238
Acidity in the stomach and		Diarrhœa, of . . . . .	240
bowels . . . . .	437	Causes . . . . .	ib.
Galling and excoriation . . . . .	438	Symptoms . . . . .	241
Vomiting, of . . . . .	439	Mode of treatment . . . . .	242
Of the tongue tie . . . . .	ib.	Dropsy, of the . . . . .	313
The colic, of . . . . .	440	Causes . . . . .	ib.
Water in the head of . . . . .	441	Symptoms . . . . .	314
Causes . . . . .	ib.	Mode of treatment . . . . .	ib.
Symptoms . . . . .	ib.	Dyspepsia; or indigestion of . . . . .	370
Mode of treatment . . . . .	ib.	Causes . . . . .	ib.
Convulsions, . . . . .	442	Symptoms . . . . .	372
Rickets, . . . . .	443	Mode of treatment . . . . .	373
Causes . . . . .	ib.		
Symptoms . . . . .	444	E	
Mode of treatment . . . . .	ib.	Empirical practice . . . . .	7
Cutaneous eruptions . . . . .	445	Emigrants, advice to . . . . .	23
Scald head . . . . .	ib.	Classes of . . . . .	ib.
Nettle Rash . . . . .	446	Analogies drawn from sav-	
Teething . . . . .	447	age life inconclusive . . . . .	25
Weaning . . . . .	449	Misdirected industry and	
Diarrhœa, or looseness . . . . .	450	laziness, or evil habits . . . . .	ib.
Cholera infantum . . . . .	451	Dry house, good spring	
Causes . . . . .	ib.	and winter clothing . . . . .	26
Symptoms . . . . .	453	Proper time for the re-	
Mode of treatment . . . . .	454	moval of families to	
Worms, . . . . .	456	the Western country . . . . .	27
Symptoms . . . . .	458	Change of constitution ex-	
Mode of treatment . . . . .	459	perienced by strangers . . . . .	24
Accidents to which chil-		Alterations in the secre-	
dren are especially lia-		tions of the liver, &c.	
ble . . . . .	548	common to northern	
Casualties . . . . .	486	people on visiting the	
Substances stopped be-		southern country . . . . .	27
tween the mouth and		Mode of treatment . . . . .	28
stomach . . . . .	ib.		



# INDEX.

555

	Page		Page
Practice of taking salts, &c.	28	Ripe fruit	79
Eyes, inflammation of the	176	Water	ib.
Causes	ib.	Of unwholesome air	80
Sometimes the effect of gonorrhœal virus applied to this organ	ib.	Stagnated air	ib.
Symptoms	177	Hives, or Croup	205
Mode of treatment	ib.	Causes	206
Epilepsy, or falling sickness, of the	382	Symptoms	ib.
Causes	ib.	Mode of treatment	207
Symptoms	383	Heart burn, of the	357
Mode of treatment	ib.	Hysteric affections, of	363
Essence of Beef	552	Hypochondriacal affections, of	367
<b>F</b>		<b>I</b>	
Folly of affecting originality	5	Introduction	5
Fevers, of	99	Inflammatory, or acute continual fever	100
Remarks of Dr. Fordyce on	100	Causes	ib.
Paintings or swoonings, of	388	Symptoms	101
Flatulencies, or wind, of	391	Mode of treatment	ib.
Femoral abscess	543	Influenza	198
Felon on Whitlow	546	Symptoms	203
<b>G</b>		Mode of treatment	204
Gravel, or stone, of the	258	Intestines, inflammation of the	226
Causes	ib.	Symptoms	ib.
Symptoms	ib.	Mode of treatment	227
Mode of treatment	260	Itch, of the	393
Gout, of the	318	— Disease resembling the	395
Causes	ib.	Intoxication, treatment of	551
Symptoms	ib.	<b>J</b>	
Mode of treatment	319	Jaundice, of the	216
<b>H</b>		Causes	ib.
Health, preservation of	59	Symptoms	217
Of wet feet	ib.	Mode of treatment	ib.
Of damp beds	ib.	<b>K</b>	
Of insensible perspiration	60	Kidneys, inflammation of the	248
Sudden transitions and drinking cold water when hot	61	Causes	249
Advice of Celsus	63	Symptoms	ib.
Of cleanliness	ib.	Mode of treatment	ib.
Of bathing	64	Kings evil, or scrofula, of the	343
Of common evacuations	65	Causes	ib.
By stool	ib.	Symptoms	344
By urine	67	Mode of treatment	ib.
Of sleep and watching	69	<b>L</b>	
Of clothing	71	Letter written by Doctor Johnson	11
Of exercise	73	Local diseases, introduction to	143
Inactivity, the effects of	74	Lungs, inflammation of the	156
Of laborious employments	76	Causes	157
Carrying heavy burdens	ib.	Symptoms	ib.
Of Food	78	Mode of treatment	158
Too much food generally eaten	ib.	Spurious form of this disease	159
Of improper and proper modes of cooking	79	Mode of treatment	ib.
		Liver, inflammation of the	211
		Symptoms	ib.

	Page		Page
Causes . . . . .	212	Mode of treatment . . . . .	128
Mode of treatment . . . . .	ib.	Eruptions in this disease . . . . .	
Chronic inflammation of the liver . . . . .	214	often critical . . . . .	130
Causes . . . . .	ib.	Nervous complaints, of . . . . .	359
Mode of treatment . . . . .	ib.	Causes . . . . .	ib.
Locked Jaw, or Tetanus of . . . . .	379	Symptoms . . . . .	360
Causes . . . . .	ib.	Mode of treatment . . . . .	361
Symptoms . . . . .	380	Night mare, of the . . . . .	390
Mode of treatment . . . . .	381		
Lumber Abscess . . . . .	542	P	
		Passions, on the . . . . .	41
M		Common-place words of . . . . .	42
Mildness in medical treatment, real . . . . .	8	condolence . . . . .	ib.
cruelty . . . . .	9	Fretfulness . . . . .	ib.
Miasmata, definition . . . . .	209	Of love . . . . .	43
Munps, of the . . . . .	ib.	Power of this passion . . . . .	44
Symptoms . . . . .	210	Of jealousy . . . . .	45
Mode of treatment . . . . .	217	Of envy . . . . .	46
Measles, of the . . . . .	277	Hatred and revenge . . . . .	48
Causes . . . . .	ib.	Of fear . . . . .	51
Symptoms . . . . .	ib.	Of grief . . . . .	52
Mode of treatment . . . . .	279	Of hope . . . . .	54
Attempts made to commu- . . . . .		Of joy . . . . .	56
nicate this disease by . . . . .	280	Of religious melancholy . . . . .	57
inoculation . . . . .	411	Pulse, of the . . . . .	97
Mortification, of . . . . .	ib.	Directions for feeling the . . . . .	ib.
Causes . . . . .	412	Pleurisy . . . . .	152
Symptoms . . . . .	412	Causes . . . . .	ib.
Mode of treatment . . . . .	413	Symptoms . . . . .	ib.
Charcoal poultice . . . . .		Mode of treatment . . . . .	153
		In bleeding, a large orifice . . . . .	154
N		advisable . . . . .	154
Nursing the sick . . . . .	88	Piles, bleeding and blind, of the . . . . .	292
Responsibility resting on . . . . .	ib.	Causes . . . . .	ib.
nurses . . . . .	89	Mode of treatment . . . . .	293
Absurdity of large doses . . . . .		Painful affections . . . . .	303
of inert teas, &c. . . . .	90	Head-achs . . . . .	304
Caution in relation to moving . . . . .		Causes . . . . .	ib.
very sick or weak persons . . . . .	90	Mode of treatment . . . . .	305
Loquacity in a nurse—a . . . . .	ib.	Tooth-ach, of the . . . . .	307
great evil . . . . .	ib.	Causes . . . . .	ib.
Whispering, also, injurious in . . . . .	ib.	Mode of treatment . . . . .	ib.
a sick room . . . . .	ib.	Ear-ach, of the . . . . .	309
Dismal face not requisite for . . . . .	ib.	Stomach, pain of the . . . . .	310
visitants . . . . .	ib.	Palsy, of the . . . . .	376
Temperature of a sick room . . . . .	91	Causes . . . . .	377
Proper mode of preparing . . . . .		Symptoms . . . . .	ib.
nourishment for, and giv- . . . . .	ib.	Mode of treatment . . . . .	ib.
ing it to a sick person . . . . .	ib.	Issues, when proper, and . . . . .	378
False kindness . . . . .	ib.	mode of making . . . . .	378
Nervous fevers, of . . . . .	122	Poisons, of . . . . .	403
Definition of . . . . .	ib.	Stomach tube . . . . .	404
Nervous fever, slow . . . . .	127	Poisoned wounds, by snakes, &c. of . . . . .	406
Causes . . . . .	ib.	Canine madness, . . . . .	407
Symptoms . . . . .	ib.	Symptoms . . . . .	409
		Mode of treatment . . . . .	410

# INDEX.

557

	Page		Page
<b>Q</b>		<b>Wounds, of</b>	
Quinsey, or inflammatory sore		incised	467
throat	181	lacerated	469
Causes	ib.	Burns and scalds	470
Symptoms	ib.	Bruises	472
Mode of treatment	182	Ulcers	473
<b>R</b>		Broken bones	475
Remitting fever	113	Splints for broken bones	476
Symptoms	ib.	Bandages for do.	477
Mode of Treatment	114	Dislocations	478
Rheumatism, of the	323	of the jaw	479
Causes	324	of the shoulder	480
Symptoms	ib.	of the elbow	481
Mode of treatment	ib.	of the thigh	ib.
Ring worm, of the	397	Sprains, of	482
<b>S</b>		Herniæ, or ruptures, of	483
Senses, external	37	Mode of treat-	484
Feeling	ib.	<b>T</b>	
Smelling	ib.	Typhus fever	123
Taste	38	No modern disease	ib.
Hearing	ib.	Causes	ib.
Seeing	39	Symptoms	ib.
Sick Stomach	145	Mode of treatment	124
Causes	ib.	Personal practice of	
Symptoms	146	Cullen	ib.
Mode of treatment	148	Tetter, or herpes, of the	396
Stomach, inflammation of the	223	<b>U</b>	
Symptoms	224	Uncertainty of human science	6
Mode of treatment	ib.	Ulcerous sore throat	185
Small pox, of the	261	Causes	ib.
Causes	262	Symptoms	ib.
Symptoms	ib.	Mode of treat-	
Mode of treatment	265	ment	186
Scarlet fever, of the	281	Urine, an inordinate flow of	252
St. Anthony's fire, or Erysipelas,		Causes	ib.
of the	283	Symptoms	253
Causes	ib.	Mode of treatment	ib.
Symptoms	284	Incontinency of	255
Mode of treatment	ib.	A suppression of	256
Scurvy, of the	327	<b>V</b>	
Causes	ib.	Vomiting, of	245
Symptoms	328	Causes	ib.
Mode of treatment	ib.	Mode of treatment	246
St. Vitus's dance, of	385	Vaccine disease, of the	269
Causes	ib.	Difference between the	
Symptoms	ib.	pustules and those of	
Mode of treatment	386	the small pox	272
Scirrhus and cancer, of	399	Appearance of the pustule	
Causes	ib.	in the African	273
Symptoms	ib.	A mild and inoffensive	
Mode of treatment	400	disease	274
Surgery, of	463		
Bloodletting	464		

	Page
Venereal diseases, of .	331
Virulent Gonorrhœa, or	
clap, of the .	332
Symptoms .	ib.
Mode of treatment	ib.
Gleet, of the .	336
Syphilis, or pox, of	337
Chancre, of .	ib.
Mode of treatment	338
Buboes, of .	340
Treatment of .	ib.

## W

Whooping Cough . . . . .	195
Women, diseases of . . . . .	415
Menstrual, or monthly discharge . . . . .	416
Fluor albus, or whites . . . . .	421
Barrenness . . . . .	422
Pregnancy . . . . .	423
Abortion . . . . .	424
Common causes of . . . . .	ib.
Signs of approaching . . . . .	ib.
To prevent . . . . .	ib.
Child birth . . . . .	426
Treatment after delivery . . . . .	427
Treatment of the infant . . . . .	ib.

	Page
Inflammation of the womb . . . . .	428
A suppression of the u- sual discharges . . . . .	ib.
Milk fever, prevention of, . . . . .	ib.
Inflammation of the breasts . . . . .	429
Hoffman's observations . . . . .	ib.
Puerperal or child bed fever . . . . .	430
Symptoms . . . . .	ib.
Mode of treatment . . . . .	ib.
Fretted or chopped nipples	543

Y

Yellow Fever	115
Causes,	116
Contagious or non-contagious character	117
Symptoms	ib.
Mode of treatment	118
Opinion of Dr. Tully respecting emetics	120
Practice of Creole nurses	121

## INDEX TO THE DISPENSATORY.

	A	Page		Page
			Adhesive plaster	505
			Arrow root	ib.
Acids		503	Aloes	ib.
	Sulphuric	ib.	Ammonia, or volatile alkali	ib.
	Muriatic and nitric	ib.	Muriate of, or sal ammo-	
	Vinegar	ib.	niac	506
	Lemon juice	ib.	Water of	ib.
Alum		504	Carbonate of	ib.
Antimonial wine		ib.	Acetate of, or spirit of	
Anise seed		ib.	mindererus	ib.
Alcohol		ib.	Ammoniacum, gum	ib.
	Diluted	ib.	Arsenic	ib.
Asafoetida		ib.	Arabic, gum	507




# INDEX.

359

	Page		Page
<b>B</b>		Essence of mustard	517
Bark, Peruvian	507	Essence of peppermint	ib.
Black drop	ib.	Epsom salts	ib.
Blue vitriol, or sulphate of copper	508	<b>F</b>	
Bear berry.— <i>Uva Ursi</i>	ib.	Flaxseed.— <i>Linseed</i>	ib.
Blistering flies, or cantharides	ib.	Fox glove.— <i>Digitalis</i>	ib.
British oil	509	<b>G</b>	
Barley, pearl	ib.	Gamboge	518
Blue or Mercurial pill	ib.	Garlic	ib.
Borax	ib.	Gum guaiacum	ib.
Bone set.— <i>Thorough wort</i>	ib.	Godfrey's cordial	519
Brown or pectoral mixture	510	Ginger	ib.
Blood root.— <i>Indian paint</i>	ib.	Gargles	ib.
<b>C</b>		Glysters, or injections	ib.
Canella alba.— <i>Wild cinnamon</i>	ib.	Gentian root	520
Cordials	502	Glauber's salts	ib.
Castor oil	511	Gall-nut	ib.
Chanomile flowers	ib.	<b>H</b>	
Cloves	ib.	Honey	521
Columbo root	ib.	Heating plaster	ib.
Carrot	ib.	Hops	ib.
Croton oil	ib.	Hemlock	ib.
Charcoal	512	<b>I</b>	
Catechu	ib.	Infusions	500
Copaiva, balsam	ib.	India, pride of	522
Cascarilla bark	ib.	Ice	ib.
Camphor	ib.	Ipecacuanha	ib.
Castor	513	Indian Tobacco	523
Chalk, prepared, or prepared car- bonate of lime	ib.	<b>J</b>	
Caustic lunar.— <i>Nitrate of silver</i>	ib.	Jalap	ib.
Créam of tartar.— <i>Super tartrate of potash</i>	ib.	James' powder	ib.
Camphorated spirits	ib.	Juniper berries	ib.
Calomel, or mild sub-muriate of mercury	514	Jerusalem oak.— <i>Worm seed</i>	ib.
Corrosive sublimate	ib.	<b>K</b>	
Coxe's hive syrup	ib.	Kino, gum	524
Carbonate or rust of iron	ib.	<b>L</b>	
Copperas, or green vitriol	ib.	Litharge, compound plaster of	ib.
<b>D</b>		Logwood	ib.
Dewberry	ib.	Laudanum	ib.
Decoctions	500	Lip salve	525
Dover's powders	515	Liquorice	ib.
Dogwood	ib.	Lime water	ib.
Dandelion	ib.	Lavender, compound spirits of	ib.
<b>E</b>		Lee's antibilious pills	ib.
Ether	ib.	Litharge plaster	ib.
Elixir of vitriol	ib.	Lisbon diet drink	526
Eye waters	516		
Elder	ib.		
Elm, slippery	ib.		

	Page		Page
<b>M</b>		<b>S</b>	
Mustard seed . . . . .	526	Senna . . . . .	533
Male fern . . . . .	ib.	Squills . . . . .	ib.
Myrrh . . . . .	527	Vinegar of . . . . .	ib.
Manna . . . . .	ib.	Oxymel of . . . . .	ib.
May apple . . . . .	ib.	Seneka snake root . . . . .	ib.
Musk . . . . .	ib.	Saline draught . . . . .	534
Mezereon . . . . .	528	Sulphureous fumigations . . . . .	ib.
Mushroom catsup . . . . .	ib.	Sweating . . . . .	ib.
Muriated tincture of iron . . . . .	ib.	Spiced Rhubarb . . . . .	535
Magnesia, carbonate of . . . . .	ib.	Soap . . . . .	ib.
—— calcined . . . . .	ib.	Saltpetre—nitre . . . . .	ib.
Mercury, or quicksilver . . . . .	529	Sulphur, flour of . . . . .	ib.
<b>O</b>		Sweet spirits of nitre . . . . .	536
Opium . . . . .	ib.	Strengthening plaster . . . . .	ib.
Oil of turpentine . . . . .	ib.	Syrup of rhubarb . . . . .	ib.
Ointment, mercurial . . . . .	530	Sassafras . . . . .	ib.
White precipitate . . . . .	ib.	Seidlitz powders . . . . .	ib.
Basilicon . . . . .	ib.	Sugar of lead . . . . .	ib.
Tar . . . . .	ib.	Soda powders . . . . .	537
Savin . . . . .	ib.	Spice plaster . . . . .	ib.
Simple . . . . .	ib.	Staughton's bitters . . . . .	ib.
Opodeldoc, . . . . .	ib.	Sago . . . . .	ib.
<b>P</b>		<b>T</b>	
Poke . . . . .	531	Tobacco . . . . .	ib.
Pink root . . . . .	ib.	Tartar emetic . . . . .	538
Potash, tartrate of, soluble tartar . . . . .	ib.	Tin, powder of . . . . .	ib.
Sub carbonate of . . . . .	ib.	<b>V</b>	
Paregoric elixir . . . . .	ib.	Vitriolated tartar . . . . .	ib.
Pleurisy root— <i>butterfly weed</i> . . . . .	ib.	Virginia snake root . . . . .	ib.
Pills . . . . .	501	Volatile liniment . . . . .	539
Pippsiseva— <i>ground holly</i> . . . . .	532	<b>W</b>	
Quassia wood . . . . .	ib.	White precipitate . . . . .	ib.
<b>R</b>		White vitriol— <i>sulphate of zinc</i> . . . . .	ib.
Rochelle salts . . . . .	ib.	Wine whey . . . . .	ib.
Red precipitate . . . . .	ib.	Wine . . . . .	501
Rhubarb . . . . .	ib.	Water . . . . .	ib.

## TO THE PUBLIC.



THE *FAMILY PHYSICIAN* is now concluded; and the Author is about to bid his readers farewell. In originating and compiling a book of this size, which embraces such a variety and number of interesting topics, an acquaintance is, (as it were,) formed with the community at large. This, to the writer, is broken by retirement into the walks of private life.

Though making no peculiar claims to the possession of benevolent sensations, neither pretending to more disinterestedness than falls to the lot of many others, he can again, as intimated at the commencement, in simplicity of heart, hope, that this work will prove serviceable to many, from whom he never expects any compensation.

A medical book, written on this plan, was wanted in the Western Country; Dr. Buchan's, which encountered and triumphed over the test of opposition in Europe, was not adapted to this climate, neither to the present advanced stage of medical science. In his day, he stood almost alone, and succeeding writers have in many places copied his sentiments, not unfrequently without due acknowledgement. This, it is true, cannot injure him, but it derogates from the candour of *systematic authors*, who disliked to acknowledge that they were indebted to a *popular work on medicine*.

Dr. Buchan was an original; his excellencies are many, and his errors and deficiencies, so proven by the advance of knowledge, have not been spared in the foregoing pages. The principal fault of his work is timidity

in recommending modes of practice ; that others, his contemporaries, justly fall under the same censure, is demonstrated by extracts inserted at pages 115 and 124 of this volume.

It will be noticed, that the opinions and experience of physicians belonging to the Western Country have been respectfully considered ; and it affords very great satisfaction to acknowledge personal obligations to several medical gentlemen, who, by assistance in writing, and especially in revision, have contributed towards this undertaking.

From the complicated nature of this work, the peculiar character of many subjects which it embraces, and the necessity of frequently substituting English for Greek and Latin words, which more naturally occur to the medical writer, the language is often unequal, and sometimes prolix: this could not well be avoided, and further, the principal aim, in relation to style, has been to express ideas, and to record facts intelligibly.

ANTHONY A. BENEZET.



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